FBI File: Greensboro Massacre (Nov 3, 1979)

Obtained (via FOIA) and posted by AltGov2

6
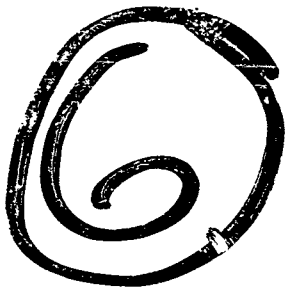
Series I   6th Irradiation

9111906550Y I   12/26/79

4/4 photos

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1441:04

91119065 RF   PB   S626A

SAMPLE TIME   27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0836:23   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   607 SEC   VOLUME   UG   7027.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

974	61	49	48	54	58	57	57
981	57	43	45	71	41	39	62
988	46	61	58	52	46	59	49
995	39	53	54	45	48	58	65
1002	53	47	45	51	60	54	45
1009	46	51	45	56	60	49	50
1016	52	70	70	85	126	137	190
1023	215	198	174	133	83	87	59
1030	66	35	52	44	46	49	46
1037	42	41	30	43	41	52	39
1044	43	45	60	48	51	52	49
1051	64	47	54	54	35	51	42
1058	47	49	33	47	58	36	48
1065	58	49	45	43	52	55	40

CNTS/MICROGRAM COPPER   181.76

COPPER IN STANDARD   .078%
CENTROID CHANNEL   1023
HALF-LIFE CU-64   768 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
   E=2.7183
   LN2=.69315

EXPERIMENT 1   31DEC79 1442:13

91119065 RF   PB   S626B

SAMPLE TIME	27DEC79 1021:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0846:43	TYPE	COR 5M
PRESET TIME 600 SEC		GEOMETRY	SHELF 1 0.250
ELAPSED TIME 609 SEC		VOLUME	UG 8158.000
LIVE TIME 600 SEC		DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                            OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

974	75	57	70	62	54	91	60
981	63	63	65	66	68	64	64
988	61	47	64	60	64	65	64
995	72	60	63	73	72	64	55
1002	63	76	64	54	70	60	61
1009	59	56	56	55	67	63	58
1016	68	76	92	99	148	210	239
1023	245	247	186	145	109	91	60
1030	45	62	53	61	51	46	56
1037	49	59	57	52	51	49	49
1044	48	60	63	56	51	63	47
1051	51	51	45	46	44	56	52
1058	61	50	65	43	55	49	49
1065	54	48	55	59	52	59	65

CNTS/MICROGRAM COPPER   193.32

COPPER IN STANDARD	.078%
CENTROID CHANNEL	1023
HALF-LIFE CU-64	768 MIN.
BACKGROUND SPACING	25
BACKGROUND CHANNELS	10

CONSTANTS:
   E=2.7183
  LN2=.69315

EXPERIMENT 1   31DEC79 1443:21

91119065 RF   PB   S626C

SAMPLE TIME	27DEC79 1021:00	LOCATION	AFFRI	
ACQUISITION TIME	29DEC79 0857:05	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	609 SEC	VOLUME	UG	8522.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                            OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

974	59	59	59	48	67	82	57
981	78	55	78	55	64	67	58
988	55	55	51	52	50	62	57
995	67	65	72	79	53	44	67
1002	52	63	59	58	60	67	66
1009	67	50	57	72	64	53	81
1016	56	80	91	115	123	192	270
1023	240	206	184	163	123	77	74
1030	61	57	59	51	48	48	68
1037	59	64	55	63	66	38	57
1044	38	46	61	52	56	43	43
1051	62	42	52	54	60	54	51
1058	55	57	62	52	60	53	70
1065	55	70	62	49	46	53	54

CNTS/MICROGRAM COPPER   184.79

COPPER IN STANDARD	.078%
CENTROID CHANNEL	1023
HALF-LIFE CU-64	768 MIN.
BACKGROUND SPACING	25
BACKGROUND CHANNELS	10

CONSTANTS:
    E=2.7183
    LN2=.69315

AVG.   CNTS/UG COPPER   186.62

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1444:18

91119065 RF              PB                    S626A

SAMPLE TIME             27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME        29DEC79 0836:23   TYPE       COR 5M
PRESET TIME       600 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME      607 SEC                 VOLUME     UG        7027.000
LIVE TIME         600 SEC                 DETECTOR   GELI 15

CALIBRATION DATE        28DEC79 0952:04   KEV/CH        0.500
                                          OFFSET        0.546

                    NORMALIZATION CONSTANTS     GAMMA
FWHM               5    A =    2.000       SLOPE        0.500 E-3
SENSITIVITY       16    B =   10.000       OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)   80.00

    1080       43        38        40        44        56        48        48
    1087       57        49        39        49        51        42        49
    1094       41        42        56        51        53        40        54
    1101       46        51        48        50        50        54        53
    1108       61        43        58        49        57        46        68
    1115       53        67        81        82        84        89       114
    1122       85       116       185       440      1272      3371      6421
    1129     9262      8872      5938      2684       832       141        31
    1136       26        14        13        15        10        12        13
    1143       10        10        13        11        19         7         8
    1150       10        10        10         9        11         7         6
    1157       12         7        13         8         5        12         8
    1164        5        16         9        18        12        11        11
    1171       10        10         7         9         6        10        12
```

CNTS/MICROGRAM ANTIMONY   119.89

```
ANTIMONY IN STANDARD      .72%
CENTROID CHANNEL          1129
HALF-LIFE SB-122          4032 MIN.
BACKGROUND SPACING          25
BACKGROUND CHANNELS         10
CONSTANTS:
    E=2.7183
  LN2=.69315
```

EXPERIMENT 1   31DEC79 1445:27

91119065 RF   PB   S626B

SAMPLE TIME	27DEC79 1021:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0846:43	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	609 SEC	VOLUME	UG 8158.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

1080	55	63	42	50	47	59	60
1087	50	65	51	64	62	65	54
1094	56	55	73	71	67	62	57
1101	60	65	55	62	55	52	57
1108	57	52	78	77	72	71	82
1115	70	64	90	114	143	127	104
1122	104	159	235	557	1637	4103	8169
1129	11350	11023	7245	3198	989	206	57
1136	28	18	20	15	10	14	13
1143	14	22	16	19	13	13	19
1150	17	17	13	9	9	20	9
1157	13	5	17	17	7	14	13
1164	15	11	9	13	20	18	10
1171	8	13	20	10	12	14	12

CNTS/MICROGRAM ANTIMONY   127.83

ANTIMONY IN STANDARD   .72%
CENTROID CHANNEL   1129
HALF-LIFE SB-122   4032 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
  LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1446:35

91119065 RF   PB   S626C

SAMPLE TIME   27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0857:05   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   8522.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

        1080   53   49   57   54   49   78   50
        1087   62   57   69   62   67   63   53
        1094   49   64   61   52   50   51   64
        1101   53   65   56   67   68   64   76
        1108   65   69   65   56   60   64   60
        1115   78   83   86   104   108   130   112
        1122   116   150   237   568   1605   4027   7992
        1129   10966   10614   7140   3207   922   212   49
        1136   29   19   15   12   11   16   17
        1143   11   11   14   14   16   13   19
        1150   13   17   8   14   9   13   10
        1157   7   12   21   13   14   12   16
        1164   13   15   17   19   14   11   9
        1171   9   20   11   13   19   16   12

CNTS/MICROGRAM ANTIMONY   119.46

ANTIMONY IN STANDARD   .72%
CENTROID CHANNEL   1129
HALF-LIFE SB-122   4032 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
  LN2=.69315

AVG.   CNTS/UG ANTIMONY   122.39

EXPERIMENT 1 31DEC79 1447:32

91119065 RF   PB   S604A

```
SAMPLE TIME              27DEC79 1021:00   LOCATION    AFFRI
ACQUISITION TIME         29DEC79 0907:27   TYPE        COR 5M
PRESET TIME        600 SEC                 GEOMETRY    SHELF 1        0.250
ELAPSED TIME       621 SEC                 VOLUME      UG          8437.000
LIVE TIME          600 SEC                 DETECTOR    GELI 15

CALIBRATION DATE         28DEC79 0952:04   KEV/CH          0.500
                                           OFFSET          0.546
```

```
                       NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000           SLOPE         0.500 E-3
SENSITIVITY       16    B =   10.000           OFFSET        4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE    1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00
```

```
1267      26       24       25       24       23       27       19
1274      26       24       21       30       24       34       24
1281      30       31       23       24       23       16       24
1288      22       24       43       59       84      102       74
1295      54       36       29       20       18       31       29
1302      24       30       28       19       26       20       16
1309      27       24       32       37       73      104      138
1316     172      132       63       39       22       15       28
1323      25       22       26       24       26       15       28
1330      30       28       33       21       26       25       23
1337      32       20       26       23       30       19       17
1344      16       23       29       16       18       19       18
1351      14       16       17       22       25       22       19
1358      21       13       22       14       20       19       21
```

CNTS/MICROGRAM ARSENIC   22.93

```
ARSENIC IN STANDARD      .10%
CENTROID CHANNEL         1316
HALF-LIFE AS-76          1584 MIN.
BACKGROUND SPACING         10
BACKGROUND CHANNELS        10
CONSTANTS:
    E=2. 7183
    LN2=. 69315
```

EXPERIMENT 1   31DEC79 1448:40

91119065 RF   PB   S604B

```
SAMPLE TIME              27DEC79 1021:00    LOCATION   AFFRI
ACQUISITION TIME         29DEC79 0918:02    TYPE       COR 5M
PRESET TIME        600 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME       618 SEC                  VOLUME     UG          7083.000
LIVE TIME          600 SEC                  DETECTOR   GELI 15

CALIBRATION DATE         28DEC79 0952:04    KEV/CH         0.500
                                            OFFSET         0.546
```

```
                    NORMALIZATION CONSTANTS    GAMMA
FWHM             5   A =    2.000             SLOPE        0.500 E-3
SENSITIVITY     16   B =   10.000             OFFSET       4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00
```

```
1266    24      27      18      23      16      21      26
1273    24      20      21      16      25      20      27
1280    18      19      21      20      33       9      15
1287    23      27      22      40      59      78      73
1294    71      57      36      17      22      13      19
1301    24      14      20      16      12      18      21
1308     9      19      15      22      40      63     121
1315   117     111      97      61      36      28      15
1322    19      15      22      28      17      19      23
1329    20      20      21      22      27      18      22
1336    15      14      18      26      15      22      10
1343    20      19      16      21      13       8      12
1350    12      20      15      13      19      14      25
1357    13      11      10      25      19      12      22
```

CNTS/MICROGRAM ARSENIC   23. 22

```
ARSENIC IN STANDARD      .10%
CENTROID CHANNEL         1315
HALF-LIFE AS-76          1584 MIN.
BACKGROUND SPACING         10
BACKGROUND CHANNELS        10
CONSTANTS:
    E=2. 7183
    LN2=. 69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1449:47

91119065 RF   PB   S604C

SAMPLE TIME   27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0928:33   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   616 SEC   VOLUME   UG   6815.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

    1266   18   21   17   15   16   30   22
    1273   18   26   18   23   16   18   22
    1280   17   28   21   20   16   14   12
    1287   19   24   19   28   35   70   71
    1294   63   53   33   20   21   12   17
    1301   16   20   11   18   11   21   15
    1308   16   18   20   20   27   60   85
    1315   122   130   92   55   27   17   16
    1322   24   9   18   15   9   17   14
    1329   11   22   17   21   27   27   21
    1336   26   12   19   21   12   20   13
    1343   14   17   14   15   20   10   11
    1350   9   16   16   19   8   10   13
    1357   10   12   22   13   12   14   11

CNTS/MICROGRAM ARSENIC   23.82

ARSENIC IN STANDARD   .10%
CENTROID CHANNEL   1315
HALF-LIFE AS-76   1584 MIN.
BACKGROUND SPACING   10
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
    LN2=.69315

AVG.   CNTS/UG ARSENIC   23.32

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1450:45

91119065 RF              PB                    0325H-1

SAMPLE TIME            27DEC79 1021:00    LOCATION    AFFRI
ACQUISITION TIME       29DEC79 0703:24    TYPE        COR 5M
PRESET TIME      600 SEC                  GEOMETRY    SHELF 1      0.250
ELAPSED TIME     607 SEC                  VOLUME      UG        9291.000
LIVE TIME        600 SEC                  DETECTOR    GELI 15

CALIBRATION DATE       28DEC79 0952:04    KEV/CH         0.500
                                          OFFSET         0.546

                      NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000              SLOPE      0.500 E-3
SENSITIVITY     16    B =   10.000              OFFSET     4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    995      31      54      52      50      56      46      40
   1002      57      57      68      55      53      51      43
   1009      59      51      50      47      44      54      48
   1016      49      64      71      91     120     152     176
   1023     189     151     128     112      85      70      61
   1030      42      39      61      49      42      39      48
   1037      45      49      45      53      42      35      56
   1044      51      40      36      43      44      43      40
PERCENT COPPER                        .0458
   % RSD COUNTING      5.2
   1101      48      48      54      49      68      62      56
   1108      52      47      53      58      74      48      63
   1115      58      67      79      95     112     102     107
   1122      95     135     206     495    1391    3615    6975
   1129    9736    9223    6011    2571     815     162      39
   1136      25      11      12      12      12      14      19
   1143      15      11       7      17      11      11      11
   1150      12      12      13      13       8       7       7
PERCENT ANTIMONY                      .5484
   % RSD COUNTING      .5
   1286      11      10       6      15      13      10      30
   1293      27      31      20      14       8       7       8
   1300       4       4       5       5       9       9       6
   1307       5      11       2       8       9       7       7
   1314       9       8       5      11       7       4       8
   1321       3       7       5       4       3      10       6
   1328       4       7       9       9      11       6       9
   1335       5       7       7       8       4      11       6
PERCENT ARSENIC                       .0017
   % RSD COUNTING     84.0
CENTROID CHANNEL COPPER      1023    HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129              SB-122  4043 MIN.
                 ARSENIC     1314              AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER     186.61   BACKGROUND SPACING:
                 ANTIMONY   122.38       COPPER    25
                 ARSENIC     23.31       ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1452:39

91119065 RF   PB   Q325H-2

SAMPLE TIME   27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0713:45   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   607 SEC   VOLUME   UG   8308.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   994   46   49   44   41   50   59   59
  1001   49   57   49   51   42   59   46
  1008   52   39   52   45   45   49   44
  1015   40   39   70   72   99   89   111
  1022   156   139   156   127   94   82   62
  1029   59   49   51   49   56   37   53
  1036   39   45   42   45   52   42   40
  1043   42   27   43   43   38   50   40
PERCENT COPPER   .0409
   % RSD COUNTING   6.2
  1101   46   59   52   59   43   46   49
  1108   49   63   56   44   53   64   51
  1115   61   67   73   90   109   98   90
  1122   79   107   211   450   1246   3367   6579
  1129   9378   8894   5753   2647   773   175   42
  1136   18   6   17   9   10   12   17
  1143   8   11   11   6   9   14   15
  1150   15   11   11   10   12   10   5
PERCENT ANTIMONY   .5886
   % RSD COUNTING   .5
  1287   10   4   10   10   16   22   37
  1294   34   24   21   8   8   7   9
  1301   5   5   8   16   7   6   5
  1308   3   6   6   6   7   9   4
  1315   11   14   14   7   5   9   6
  1322   8   6   6   9   11   6   8
  1329   10   7   10   5   9   1   12
  1336   6   12   12   8   7   8   7
PERCENT ARSENIC   .0016
   % RSD COUNTING   110.4
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   186.61   BACKGROUND SPACING:
                 ANTIMONY   122.38   COPPER   25
                 ARSENIC   23.31   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1 31DEC79 1454:33

91119065 RF   PB   Q325H-3

SAMPLE TIME	27DEC79 1021:00	LOCATION AFFRI
ACQUISITION TIME	29DEC79 0724:05	TYPE COR 5M
PRESET TIME 600 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 608 SEC		VOLUME UG 9724.000
LIVE TIME 600 SEC		DETECTOR GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

995	62	61	59	44	54	70	49
1002	59	47	60	46	57	62	48
1009	63	47	51	56	43	59	64
1016	58	52	76	105	135	160	180
1023	187	180	162	131	81	59	72
1030	70	49	44	57	50	47	47
1037	56	53	49	50	41	59	58
1044	45	55	61	44	50	56	46

PERCENT COPPER   .0478
   % RSD COUNTING   5.1

1101	56	62	58	56	65	53	51
1108	49	66	66	62	79	63	68
1115	69	63	50	93	122	136	106
1122	90	121	201	508	1433	3802	7467
1129	10289	9807	6851	2817	865	191	41
1136	25	13	16	16	21	14	16
1143	14	17	15	14	10	14	7
1150	9	15	9	14	14	7	8

PERCENT ANTIMONY   .5651
   % RSD COUNTING   .4

1288	8	7	17	17	39	39	33
1295	22	10	11	8	12	7	7
1302	9	8	10	11	6	5	8
1309	8	10	9	7	12	15	9
1316	20	11	6	13	5	11	11
1323	8	8	11	5	5	12	6
1330	11	16	7	7	9	18	5
1337	5	4	6	9	12	9	9

PERCENT ARSENIC   .0042
   % RSD COUNTING   40.7

CENTROID CHANNEL COPPER	1023	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1129	SB-122	4043 MIN.
ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	186.61	BACKGROUND SPACING:	
ANTIMONY	122.38	COPPER	25
ARSENIC	23.31	ANTIMONY	25
CONSTANTS:		ARSENIC	10
E=2.7183		BACKGROUND CHANNELS 10	
LN2=.69315			

EXPERIMENT 1   31DEC79 1456:27

91119065 RF   PB   Q325I-1

SAMPLE TIME	27DEC79 1021:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0734:26	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	606 SEC	VOLUME	UG 8170.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

996	41	45	46	44	41	46	42
1003	54	42	45	37	43	37	46
1010	54	45	38	42	53	38	46
1017	38	47	50	63	77	94	113
1024	80	78	83	64	45	48	29
1031	35	28	46	28	33	41	33
1038	41	34	40	35	33	33	39
1045	44	49	39	29	36	24	37

PERCENT COPPER   .0242
% RSD COUNTING   9.2

1101	46	32	33	35	34	37	46
1108	31	43	45	35	42	41	58
1115	47	53	75	103	116	119	97
1122	80	101	143	375	985	2721	5292
1129	7640	7168	4881	2003	666	143	30
1136	19	15	12	9	6	10	11
1143	9	6	9	11	6	10	12
1150	6	6	8	7	13	9	4

PERCENT ANTIMONY   .4873
% RSD COUNTING   .5

1287	5	4	8	12	9	19	35
1294	26	14	18	8	5	3	7
1301	8	15	3	1	5	6	4
1308	6	8	2	5	10	4	9
1315	15	9	19	6	5	7	4
1322	3	8	8	7	4	4	8
1329	7	6	1	5	8	4	8
1336	3	6	9	6	8	7	4

PERCENT ARSENIC   .0063
% RSD COUNTING   27.9

CENTROID CHANNEL	COPPER	1024	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	186.61	BACKGROUND SPACING:	
	ANTIMONY	122.38	COPPER	25
	ARSENIC	23.31	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1458:20

91119065 RF   PB   Q325I-2

SAMPLE TIME   27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0744:45   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   607 SEC   VOLUME   UG   9616.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                       NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   995   63   43   58   55   52   43   41
  1002   51   41   52   42   49   51   40
  1009   51   55   58   55   50   43   50
  1016   62   60   60   69   81   96   100
  1023   147   111   96   77   42   50   31
  1030   45   49   51   44   44   48   38
  1037   48   44   44   42   53   47   56
  1044   62   47   40   39   47   55   41
PERCENT COPPER   .0246
   % RSD COUNTING   8.5
  1101   63   54   50   64   43   58   56
  1108   61   64   54   55   55   56   49
  1115   62   84   84   105   151   162   137
  1122   88   131   158   485   1392   3466   6842
  1129   9428   9184   5916   2603   788   164   35
  1136   16   15   18   13   17   15   13
  1143   17   17   14   12   8   10   2
  1150   9   17   7   19   14   14   11
PERCENT ANTIMONY   .5241
   % RSD COUNTING   .5
  1288   8   7   14   11   34   26   27
  1295   29   10   5   6   4   8   6
  1302   7   10   8   6   7   4   4
  1309   13   4   9   3   13   13   10
  1316   17   11   14   7   9   3   5
  1323   10   4   8   8   9   6   1
  1330   9   11   4   9   8   7   6
  1337   12   6   7   8   7   6   8
PERCENT ARSENIC   .0059
   % RSD COUNTING   28.3
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   186.61   BACKGROUND SPACING:
                 ANTIMONY 122.38   COPPER   25
                 ARSENIC   23.31   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1500:14

91119065 RF   PB   Q325I-3

SAMPLE TIME   27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0755:05   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   606 SEC   VOLUME   UG   9066.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

    995   52   47   55   45   50   42   48
   1002   51   32   48   44   51   46   34
   1009   55   43   46   48   52   55   44
   1016   33   44   38   54   61   71   95
   1023   118   91   80   74   47   44   51
   1030   36   36   37   35   37   35   46
   1037   28   45   46   32   51   34   51
   1044   51   36   46   50   32   37   34
PERCENT COPPER   .0198
   % RSD COUNTING   10.5
   1101   57   50   47   31   46   49   41
   1108   41   50   40   53   56   56   54
   1115   53   67   96   101   150   139   90
   1122   93   91   158   401   1133   3051   5967
   1129   8257   7965   5207   2299   698   143   29
   1136   18   14   12   11   8   8   15
   1143   14   10   11   10   9   11   15
   1150   16   10   8   13   4   10   9
PERCENT ANTIMONY   .4862
   % RSD COUNTING   .5
   1287   7   7   4   8   16   28   42
   1294   41   17   15   9   3   5   9
   1301   6   4   9   12   1   8   9
   1308   6   3   9   4   7   5   9
   1315   19   13   13   12   6   12   6
   1322   2   8   6   4   7   9   7
   1329   4   7   8   8   7   9   9
   1336   10   5   9   7   4   5   8
PERCENT ARSENIC   .0042
   % RSD COUNTING   42.2
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   186.61   BACKGROUND SPACING:
                 ANTIMONY   122.38   COPPER   25
                 ARSENIC   23.31   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1502:08

91119065 RF            PB                      Q325J-1

SAMPLE TIME           27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME      29DEC79 0805:25   TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1       0.250
ELAPSED TIME     606 SEC                VOLUME     UG          8620.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04    KEV/CH          0.500
                                        OFFSET          0.546

                      NORMALIZATION CONSTANTS    GAMMA
FWHM               5   A =    2.000             SLOPE        0.500 E-3
SENSITIVITY       16   B =   10.000             OFFSET       4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE    1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%)  80.00

    995      39      60      47      42      35      42      53
   1002      46      37      36      38      53      37      44
   1009      45      41      43      43      31      43      42
   1016      44      34      41      63      57      66      94
   1023      91      91      77      69      46      46      54
   1030      36      43      39      39      33      44      41
   1037      35      27      51      44      32      37      48
   1044      35      40      46      35      36      36      42
PERCENT  COPPER                      .0186
   % RSD COUNTING      11.5
   1101      48      35      41      44      45      55      44
   1108      44      49      56      51      45      58      59
   1115      69      50      70      89     132     136     119
   1122      90      93     143     367    1023    2751    5542
   1129    7833    7524    4990    2247     666     118      39
   1136      16       9       8       9       9       6      13
   1143      14      11       8      12      13       9      13
   1150      10       7      10       9       8       5      10
PERCENT  ANTIMONY                    .4824
   % RSD COUNTING       .5
   1286       7       8       4       3      14      10      25
   1293      29      23      16      11       7       6       4
   1300       9       6       9       5       4       4       5
   1307       4       9       6       5       7       6       4
   1314      12      13      13      12       4       5      14
   1321       2       6      13       5       6       5       5
   1328       6       7       6       5       9       1       7
   1335       2       9      15      10      15       7      12
PERCENT  ARSENIC                     .0039
   % RSD COUNTING      44.5
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129             SB-122  4043 MIN.
                 ARSENIC     1314             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER    186.61   BACKGROUND SPACING:
                 ANTIMONY  122.38      COPPER    25
                 ARSENIC    23.31      ANTIMONY  25
CONSTANTS:                            ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1504:02

91119065 RF           PB                        Q325J-2

SAMPLE TIME           27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME      29DEC79 0815:44   TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1      0.250
ELAPSED TIME     607 SEC                VOLUME     UG        9325.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE      28DEC79 0952:04   KEV/CH         0.500
                                        OFFSET         0.546

                      NORMALIZATION CONSTANTS   GAMMA
FWHM               5   A =    2.000      SLOPE         0.500 E-3
SENSITIVITY       16   B =   10.000      OFFSET        4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE       1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%)   80.00

     995      61      60      49      40      39      36      48
    1002      41      43      49      46      30      48      56
    1009      52      48      50      49      47      44      49
    1016      52      52      56      46      91      90      87
    1023      80      97      83      70      60      43      42
    1030      50      41      52      35      41      47      40
    1037      53      43      51      49      40      41      40
    1044      39      53      39      47      50      39      28
PERCENT COPPER                           .0207
   % RSD COUNTING      10.0
    1101      46      62      44      51      47      48      52
    1108      46      61      50      50      68      47      64
    1115      59      53      86     112     140     133     131
    1122     100     111     185     466    1219    3041    6214
    1129    8773    8403    5533    2453     770     167      26
    1136      14      14      16       6      15      15      18
    1143      17      12       7      11      18      13       8
    1150      10       9      11       5      11       5       9
PERCENT ANTIMONY                         .4988
   % RSD COUNTING       .5
    1288      10       6       8      15      28      32      27
    1295      17      12      11       6      11       4       9
    1302       6       5       2       5      11       7       8
    1309       3       4       6       5      14       7      10
    1316      18      21       9      12      12       7      11
    1323      11       6       8       3      10       3       9
    1330       6       5       9       4      15       5       5
    1337       8       9       5       6       8       3      13
PERCENT ARSENIC                          .0072
   % RSD COUNTING      24.7
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129             SB-122  4043 MIN.
                 ARSENIC     1316             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER    186.61   BACKGROUND SPACING:
                 ANTIMONY  122.38      COPPER    25
                 ARSENIC    23.31      ANTIMONY  25
CONSTANTS:                            ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1505:56

91119065 RF   PB   Q325J-3

SAMPLE TIME	27DEC79 1021:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0826:04	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	606 SEC	VOLUME	UG 8721.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

996	43	33	64	40	38	46	49
1003	50	42	45	32	50	51	40
1010	35	39	46	40	42	46	39
1017	48	42	47	59	78	107	99
1024	93	78	54	60	49	52	48
1031	53	38	51	51	34	41	39
1038	34	30	37	30	39	35	33
1045	26	38	59	36	41	36	45

PERCENT COPPER   .0196
% RSD COUNTING   11.2

1101	46	51	32	53	36	49	40
1108	54	43	40	52	57	46	58
1115	46	73	89	95	124	137	119
1122	90	110	144	340	1095	2822	5367
1129	7843	7728	5161	2297	662	142	35
1136	13	7	11	11	10	11	8
1143	11	14	10	11	12	14	4
1150	7	9	9	5	10	7	12

PERCENT ANTIMONY   .4846
% RSD COUNTING   .5

1287	4	2	10	9	21	30	29
1294	28	19	14	11	3	6	12
1301	6	8	2	10	8	6	2
1308	3	2	7	5	10	7	17
1315	12	15	19	14	8	7	4
1322	9	5	4	8	6	5	5
1329	8	12	8	4	11	6	7
1336	8	2	5	6	7	4	12

PERCENT ARSENIC   .0090
% RSD COUNTING   21.0

CENTROID CHANNEL	COPPER	1024	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	186.61	BACKGROUND SPACING:	
	ANTIMONY	122.38	COPPER	25
	ARSENIC	23.31	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

EXPERIMENT 1 31DEC79 1507:49

91119065 RF   PB   S626A

SAMPLE TIME	27DEC79 1021:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0836:23	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	607 SEC	VOLUME	UG 7027.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	39	53	54	45	48	58	65
1002	53	47	45	51	60	54	45
1009	46	51	45	56	60	49	50
1016	52	70	70	85	126	137	190
1023	215	198	174	133	83	87	59
1030	66	35	52	44	46	49	46
1037	42	41	30	43	41	52	39
1044	43	45	60	48	51	52	49

PERCENT COPPER   .0759
  % RSD COUNTING   4.8

1101	46	51	48	50	50	54	53
1108	61	43	58	49	57	46	68
1115	53	67	81	82	84	89	114
1122	85	116	185	440	1272	3371	6421
1129	9262	8872	5938	2684	832	141	31
1136	26	14	13	15	10	12	13
1143	10	10	13	11	19	7	8
1150	10	10	10	9	11	7	6

PERCENT ANTIMONY   .7053
  % RSD COUNTING   .5

1288	11	4	18	10	27	29	33
1295	21	15	6	9	7	10	1
1302	5	9	10	8	8	9	6
1309	9	7	4	7	7	9	9
1316	14	13	17	9	7	6	4
1323	6	2	8	7	2	6	6
1330	6	4	7	6	7	5	7
1337	8	14	5	16	10	8	7

PERCENT ARSENIC   .0065
  % RSD COUNTING   35.0

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.	
	ANTIMONY	1129	SB-122	4043 MIN.	
	ARSENIC	1316	AS-76	1584 MIN.	
COUNTS/MICROGRAM	COPPER	186.61	BACKGROUND SPACING:		
	ANTIMONY	122.38	COPPER	25	
	ARSENIC	23.31	ANTIMONY	25	
CONSTANTS:			ARSENIC	10	
E=2.7183			BACKGROUND CHANNELS 10		
LN2=.69315					

EXPERIMENT 1   31DEC79 1509:43

91119065 RF   PB   S626B

SAMPLE TIME	27DEC79 1021:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0846:43	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	609 SEC	VOLUME	UG 8158.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                             OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE 0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET 4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00	

995	72	60	63	73	72 · 64	55
1002	63	76	64	54	70 60	61
1009	59	56	56	55	67 63	58
1016	68	76	92	99	148 210	239
1023	245	247	186	145	109 91	60
1030	45	62	53	61	51 46	·56
1037	49	59	57	52	51 49	49
1044	48	60	63	56	51 63	47

PERCENT COPPER   .0008
   % RSD COUNTING   4.3

1101	60	65	55	62	55 52	57
1108	57	52	78	77	72 71	82
1115	70	64	90	114	143 127	104
1122	104	159	235	557	1637 4103	8169
1129	11350	11023	7245	3198	989 206	57
1136	29	18	20	15	10 14	13
1143	14	22	16	19	13 13	19
1150	17	17	13	9	9 20	9

PERCENT ANTIMONY   .7520
  · % RSD COUNTING   .4

1287	7	13	9	8	24 29	32
1294	33	26	16	14	6 11	8
1301	6	7	6	5	7 7	11
1308	5	5	10	4	15 7	7
1315	20	19	8	12	10 6	11
1322	9	6	9	10	9 10	9
1329	8	7	12	9	9 7	8
1336	12	10	14	8	8 11	10

PERCENT ARSENIC   .0057
   % RSD COUNTING   37.5

CENTROID CHANNEL	COPPER	1023	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1315		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	186.61	BACKGROUND SPACING:		
	ANTIMONY	122.38	COPPER	25	
	ARSENIC	23.31	ANTIMONY 25		
CONSTANTS:			ARSENIC	10	
E=2.7183			BACKGROUND CHANNELS 10		
LN2=.69315					

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1511:37

91119065 RF   PB   S626C

SAMPLE TIME   27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0857:05   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   8522.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    995   67   65   72   79   53   44   67
   1002   52   63   59   58   60   67   66
   1009   67   50   57   72   64   53   81
   1016   56   80   91   115   123   192   270
   1023   240   206   184   163   123   77   74
   1030   61   57   59   51   48   48   68
   1037   59   64   55   63   66   38   57
   1044   38   46   61   52   56   43   43
PERCENT COPPER   .0772
   % RSD COUNTING   4.2
   1101   53   65   56   67   68   64   76
   1108   65   69   65   56   60   64   60
   1115   78   83   86   104   108   130   112
   1122   116   150   237   568   1605   4027   7992
   1129   10966   10614   7140   3207   922   212   49
   1136   29   19   15   12   11   16   17
   1143   11   11   14   14   16   13   19
   1150   13   17   8   14   9   13   10
PERCENT ANTIMONY   .7028
   % RSD COUNTING   .4
   1288   11   15   11   28   30   56   33
   1295   '30   19   7   13   10   8   10
   1302   13   10   5   7   8   5   12
   1309   7   9   10   5   9   11   14
   1316   9   12   7   9   12   9   9
   1323   4   11   7   7   12   6   4
   1330   9   9   7   6   12   6   6
   1337   8   15   12   7   11   8   13
PERCENT ARSENIC   .0025
   % RSD COUNTING   75.1
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   186.61   BACKGROUND SPACING:
                 ANTIMONY   122.38   COPPER   25
                 ARSENIC   23.31   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1513:31

91119065 RF           PB                    S604A

SAMPLE TIME           27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME      29DEC79 0907:27   TYPE       COR 5M
PRESET TIME      600  SEC               GEOMETRY   SHELF 1        0.250
ELAPSED TIME     621  SEC               VOLUME     UG         8437.000
LIVE TIME        600  SEC               DETECTOR   GELI 15

CALIBRATION DATE      28DEC79 0952:04   KEV/CH         0.500
                                        OFFSET         0.546

                      NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000               SLOPE       0.500 E-3
SENSITIVITY     16    B =   10.000               OFFSET      4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    996     146     150     160     150     158     154     132
   1003     148     139     159     157     159     131     147
   1010     151     143     142     138     146     130     145
   1017     124     142     154     130     141     154     155
   1024     154     145     153     142     146     131     159
   1031     120     135     131     126     134     151     140
   1038     131     112     139     122     124     143     144
   1045     138     153     122     134     140     148     142
PERCENT COPPER                          .0019
   % RSD COUNTING     194.1
   1101     162     162     158     151     161     145     169
   1108     187     148     159     180     192     191     184
   1115     256     398     682    1176    1560    1528    1017
   1122     635     468     664    1575    4534   10630   19997
   1129   27088   25252   15994    6906    2102     528     138
   1136      79      64      61      51      53      57      62
   1143      46      49      40      44      56      33      33
   1150      31      39      42      45      40      40      42
PERCENT ANTIMONY                        1.7226
   % RSD COUNTING      .3
   1288      22      24      43      59      84     102      74
   1295      54      36      29      20      18      31      29
   1302      24      30      28      19      26      20      16
   1309      27      24      32      37      73     104     138
   1316     172     132      63      39      22      15      28
   1323      25      22      26      24      26      15      28
   1330      30      28      33      21      26      25      23
   1337      32      20      26      23      30      19      17
PERCENT ARSENIC                         .0983
   % RSD COUNTING      5.2
CENTROID CHANNEL COPPER       1024   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY     1129             SB-122  4043 MIN.
                 ARSENIC      1316             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER     186.61   BACKGROUND SPACING:
                 ANTIMONY   122.38      COPPER    25
                 ARSENIC     23.31      ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1 31DEC79 1515:25

91119065 RF   PB   S604B

SAMPLE TIME   27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0918:02   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   618 SEC   VOLUME   UG   7083.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FNHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 2   ABUNDANCE LIMIT (%) 80.00

     995   118   145   144   135   128   131   130
    1002   132   125   125   132   126   125   128
    1009   128   129   125   109   117   132   110
    1016   139   108   120   126   129   144   152
    1023   112   146   131   136   118   131   120
    1030   171   123   117   129   106   120   116
    1037   113   118   109   124   113   123   105
    1044   112   118   115   136   101   113   109
PERCENT COPPER   .6667
   % RSD COUNTING   61.0
    1101   127   125   128   137   152   129   139
    1108   146   119   160   126   159   171   174
    1115   133   380   570   903   1209   1158   813
    1122   512   373   711   1195   3473   8947 16863
    1129 22982 21617 14060   6177   1829   474   116
    1136   64   46   50   43   35   43   28
    1143   42   42   37   34   38   32   28
    1150   28   29   30   29   29   29   23
PERCENT ANTIMONY   1.7530
   % RSD COUNTING   .3
    1287   23   27   22   40   59   78   73
    1294   71   57   36   17   22   13   19
    1301   24   14   20   16   12   18   21
    1308   5   19   15   22   40   63   121
    1315   117   111   97   61   36   28   15
    1322   19   15   22   28   17   19   23
    1329   20   20   21   22   27   18   22
    1336   15   14   18   26   15   22   10
PERCENT ARSENIC   .0995
   % RSD COUNTING   5.6
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   186.61   BACKGROUND SPACING:
                 ANTIMONY   122.38   COPPER   25
                 ARSENIC   23.31   ANTIMONY 25
CONSTANTS   ARSENIC   10
   E-2 7182   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1517:18

Q1112065 RF   PB   S604C

SAMPLE TIME   27DEC79 1021:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0928:33   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   616 SEC   VOLUME   UG   6815.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                          OFFSET   0.546

                        NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

     993   118   94   114   124   104   115   120
    1000   133   110   112   117   91   116   114
    1007   116   115   115   110   120   122   109
    1014   116   113   109   113   134   116   108
    1021   115   127   144   124   106   104   114
    1028   101   100   87   110   113   109   109
    1035   115   98   112   108   99   83   94
    1042   86   97   97   122   95   109   87
PERCENT COPPER   .0126
   % RSD COUNTING   32.0
    1101   116   107   119   105   124   126   115
    1108   113   127   120   121   141   117   142
    1115   215   249   479   835   1040   1062   779
    1122   495   358   445   1109   3195   7861   15156
    1129   20508   19394   12612   5564   1722   376   102
    1136   54   47   39   48   35   29   34
    1143   37   28   38   26   31   29   32
    1150   27   40   24   27   38   37   24
PERCENT ANTIMONY   1.6344
   % RSD COUNTING   .3
    1287   19   24   19   28   35   70   71
    1294   63   53   33   20   21   12   17
    1301   16   20   11   18   11   21   15
    1308   16   18   20   20   27   60   85
    1315   122   130   92   55   27   17   16
    1322   24   9   18   15   9   17   14
    1329   11   22   17   21   27   27   21
    1336   26   12   19   21   12   20   13
PERCENT ARSENIC   .1021
   % RSD COUNTING   5.5
CENTROID CHANNEL COPPER   1021   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   186.61   BACKGROUND SPACING:
                 ANTIMONY   122.38   COPPER   25
                 ARSENIC   23.31   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

	UG	%CU	%SB	%AS
91119065 RF				
0297A	10980	.02684 oℏ	.02567	.52451
0297B	8874	.03034	.02820	.54524
0297C	8745	.02962	.07619	.72178
AVERAGE	9533	.0289	.0435	.5971
%RSD		6.38	65.08	18.15
91119065 RF				
0298A	12131	.02046	.47925	.71747
0298B	10371	.02684	.47852	.72073
0298C	8789	.02834	.47665	1.75457
AVERAGE	10430	.02600	.0581	1.0642
%RSD		55.35	51.79	56.17
91119065 RF				
0363A	8351	.11150	.04695	1.79070
0363B	10731	.11291	.00735	1.06789
0363C	9141	.10709 oℏ	.73381 oℏ	.01876 oℏ
AVERAGE	9408	.1105	.2527	1.2257
%RSD		2.74	164.88	85.33
91119065 RF				
0364A	9664	.01901	.77240	.01880
0364B	9606	.01886	.80664	.02208
0364C	9889	.02003	.77670	.02397
AVERAGE	9720	.0193	.7852	.0216
%RSD		3.29	2.37	12.09
91119065 RF				
0365A	9890	.09785	.71088	.01763
0365B	9449	.10286	.74527	.01351
0365C	9631	.09750	.71530	.01340
AVERAGE	9657	.0994	.7238	.0148
%RSD		3.01	2.58	16.22
91119065 RF				
0366A	7741	.01395	.70323	.01961
0366B	8347	.01707	.70720	.01660
0366C	8524	.01746	.69530	.02108
AVERAGE	8204	.0161	.7019	.0191
%RSD		11.89	.86	11.95
91119065 RF				
0367A	10646	.10030	.75143	.01681
0367B	9660	.10345	.76073	.01302
0367C	9589	.10430	.75644	.01855
AVERAGE	9965	.1026	.7562	.0161
%RSD		2.05	.61	17.52
91119065 RF				
0368A	11212	.00418	.00014	.00117
0368B	10481	.00449	.00019	.00093
0368C	9653	.00392	.00035	.00096
AVERAGE	10448	.0042	.0002	.0010
%RSD		6.78	46.35	12.69
91119065 RF				
0355A	9500	.04697	.74004	.06235
0355B	7508	.04794	.85333	.06942
0355C	8287	.03813	.67631	.06309
AVERAGE	8432	.0443	.7565	.0649
%RSD		12.18	11.85	5.98

Summary only handle
Program 100 samples
1st 8 samples are some all
last 8 are some all

	UG	%CU	%SB	%AS
91119065 RF				
Q356A	10442	.05570	.93453	.07004
Q356B	8982	.05481	.96502	.07319
Q356C	9625	.04856	.91437	.07114
AVERAGE	9683	.0530	.9379	.0714
%RSD		7.33	2.71	2.23
91119065 RF				
Q357A	8168	.03799	.59718	.00984
Q357B	8321	.03828	.59436	.01124
Q357C	9565	.03605	.56367	.01141
AVERAGE	8685	.0374	.5850	.0108
%RSD		3.23	3.17	7.94
91119065 RF				
Q401A	9290	.05739	.61226	.00067
Q401B	8823	.06201	.61281	.00112
Q401C	9156	.05668	.59723	.00091
AVERAGE	9090	.0587	.6074	.0009
%RSD		4.93	1.45	24.74
91119065 RF				
Q402A	9512	.06668	.59929	.00127
Q402B	8811	.06148	.61293	.00065
Q402C	8057	.05398	.61524	.00017
AVERAGE	8793	.0607	.6091	.0007
%RSD		10.51	1.41	78.04
91119065 RF				
Q403A	10385	.06393	.65278	.00013
Q403B	8735	.06714	.67565	.00140
Q403C	8737	.06526	.65885	.00010
AVERAGE	9286	.0654	.6624	.0005
%RSD		2.46	1.78	134.10
91119065 RF				
Q404A	11042	.08885	.76440	.01317
Q404B	8970	.09105	.79089	.01582
Q404C	9769	.08620	.75157	.01366
AVERAGE	9927	.0887	.7689	.0142
%RSD		2.73	2.60	9.91
91119065 RF				
Q405A	8386	.06964	.65397	.00953
Q405B	9326	.07536	.64631	.00890
Q405C	9070	.07356	.63985	.00885
AVERAGE	8927	.0728	.6467	.0091
%RSD		4.01	1.09	4.16
91119065 RF				
Q368A	7490	.06255	.55174	.00409
Q368B	8978	.05915	.52880	.00450
Q368C	9657	.06326	.53778	.00745
AVERAGE	8708	.0616	.5394	.0053
%RSD		3.56	2.14	34.21

	UG	%CU	%SB	%AS
91119065 RF				
0369A	11556	.05905	.53549	.00367
0369B	10353	.05588	.51569	.00507
0369C	8824	.05994	.50745	.00764
AVERAGE	10244	.0582	.5195	.0054
%RSD		3.66	2.77	36.81
91119065 RF				
0370A	8219	.05972	.51508	.00649
0370B	10431	.05477	.52028	.00344
0370C	8939	.05497	.51706	.00692
AVERAGE	9196	.0564	.5174	.0056
%RSD		4.95	.50	33.71
91119065 RF				
0371A	8251	.05890	.84799	.03148
0371B	9463	.06451	.81086	.03304
0371C	7072	.05703	.84802	.03252
AVERAGE	8262	.0601	.8356	.0323
%RSD		6.47	2.56	2.45
91119065 RF				
0372A	8700	.06053	.50923	.00732
0372B	8205	.05728	.49891	.00440
0372C	8446	.06310	.50657	.00557
AVERAGE	8450	.0603	.5049	.0057
%RSD		4.83	1.06	25.45
91119065 RF				
0341A	7710	.07984	.69344	.01990
0341B	8460	.08009	.70160	.01673
0341C	8671	.07840	.70667	.01638
AVERAGE	8280	.0794	.7005	.0176
%RSD		1.14	.95	10.96
91119065 RF				
0342A	8041	.05012	.68879	.02363
0342B	8263	.04100	.68728	.02203
0342C	8036	.04350	.69049	.02462
AVERAGE	8113	.0448	.6888	.0234
%RSD		10.49	.23	5.57
91119065 RF				
0343A	9199	.07619	.74402	.02025
0343B	8061	.07473	.75026	.01608
0343C	9036	.08423	.75289	.01820
AVERAGE	8765	.0783	.7490	.0181
%RSD		6.52	.60	11.46
91119065 RF				
0344A	8678	.05358	.70285	.01510
0344B	9911	.05706	.66028	.01651
0344C	8005	.05571	.68248	.01618
AVERAGE	8865	.0554	.6818	.0159
%RSD		3.16	3.12	4.62

	UG	%CU	%SB	%AS
91119065 RF				
Q345A	9627	.04385	.63132	.01743
Q345B	9559	.04541	.61419	.01980
Q345C	9121	.04675	.62676	.01937
AVERAGE	9436	.0453	.6240	.0188
%RSD		3.20	1.42	6.68
91119065 RF				
Q346A	7810	.04096	.64968	.02274
Q346B	9349	.04731	.65718	.02034
Q346C	8758	.03970	.66807	.01859
AVERAGE	8639	.0426	.6583	.0205
%RSD		9.55	1.40	10.13
91119065 RF				
Q325A-1	8136	.02010	.52185	.00722
Q325A-2	9371	.01668	.54053	.00852
Q325A-3	8417	.03018	.54970	.00714
AVERAGE	8641	.0223	.5373	.0076
%RSD		31.43	2.64	10.14
91119065 RF				
Q325B-1	8939	.03047	.54175	.00351
Q325B-2	9707	.03268	.55366	.00149
Q325B-3	9830	.03336	.53893	.00284
AVERAGE	9492	.0321	.5447	.0026
%RSD		4.69	1.43	39.22
91119065 RF				
Q325C-1	8842	.02453	.52659	.00622
Q325C-2	7875	.01790	.49806	.00298
Q325C-3	9044	.02198	.51473	.00437
AVERAGE	8587	.0214	.5131	.0045
%RSD		15.56	2.79	35.85
91119065 RF				
Q325D-1	9175	.01834	.50373	.00594
Q325D-2	8570	.02439	.48855	.00424
Q325D-3	7737	.01389	.48904	.00476
AVERAGE	8494	.0188	.4937	.0049
%RSD		27.90	1.74	17.45
91119065 RF				
Q325E-1	8429	.03711	.52345	.00659
Q325E-2	7580	.03520	.51896	.00322
Q325E-3	8751	.04394	.54225	.00584
AVERAGE	8253	.0387	.5282	.0052
%RSD		11.85	2.33	33.85
91119065 RF				
Q325F-1	7724	.01652	.53731	.00733
Q325F-2	9304	.01961	.53427	.00391
Q325F-3	8138	.02762	.55274	.00740
AVERAGE	8389	.0212	.5414	.0062
%RSD		26.94	1.82	32.05
91119065 RF				
Q325G-1	8892	.02386	.52468	.00661
Q325G-2	7883	.02567	.52451	.00594
Q325G-3	8969	.02870	.54524	.00872
AVERAGE	8581	.0260	.5314	.0070
%RSD		9.37	2.24	20.43

	UG	%CU	%SB	%AS
91119065 RF				
S626A	8700	.07619	.72178	.00499
S626B	8532	.07925	.71747	.00682
S626C	7649	.07852	.72073	.00620
AVERAGE	8294	.0779	.7200	.0060
%RSD		2.04	.31	15.47
91119065 RF				
S604A	8009	.01665	1.75457	.09085
S604B	10333	.01695	1.79070	.10329
S604C	8036	.00735	1.86789	.10583
AVERAGE	8793	.0136	1.8043	.0999
%RSD		39.95	3.20	8.01

EXPERIMENT 1   31DEC79 0905:23

91119065 RF   PB   S626A

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0559:56   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   612 SEC   VOLUME   UG   8700.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

974	86	115	80	86	78	87	91
981	92	86	84	90	91	116	98
988	101	89	81	90	95	80	81
995	89	80	74	96	97	81	87
1002	91	83	89	105	71	65	106
1009	82	99	78	81	88	93	89
1016	88	87	87	116	135	135	183
1023	186	183	157	133	115	93	77
1030	78	68	73	68	77	75	65
1037	91	91	77	81	76	68	76
1044	73	74	72	71	88	87	67
1051	79	79	77	76	79	87	64
1058	74	82	79	71	92	82	71
1065	68	58	72	78	95	76	82

CNTS/MICROGRAM COPPER   311.42

COPPER IN STANDARD   .078%
CENTROID CHANNEL   1023
HALF-LIFE CU-64   768 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
  LN2=.69315

EXPERIMENT 1   31DEC79 0906:32

91119065 RF   PB   S626B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0610:21	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	611 SEC	VOLUME	UG 8532.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

974	69	101	97	81	74	91	88
981	73	83	87	67	92	95	86
988	64	91	83	76	80	76	83
995	85	92	86	77	88	81	93
1002	79	89	91	99	86	81	69
1009	75	78	86	86	88	74	96
1016	74	87	88	122	139	159	183
1023	167	155	150	128	103	76	84
1030	67	74	69	79	90	64	77
1037	69	76	75	74	61	65	83
1044	70	75	59	80	69	68	61
1051	68	72	68	70	67	83	72
1058	64	65	55	71	68	86	74
1065	70	75	76	87	70	70	71

CNTS/MICROGRAM COPPER   323.91

COPPER IN STANDARD	.078%
CENTROID CHANNEL	1023
HALF-LIFE CU-64	768 MIN.
BACKGROUND SPACING	.25
BACKGROUND CHANNELS	10

CONSTANTS:
     E=2.7183
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0907:39

91119065 RF   PB   S626C

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0620:46   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   610 SEC   VOLUME   UG   7649.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

974	69	69	73	82	68	66	72
981	71	82	66	78	68	73	91
988	78	80	73	77	69	85	66
995	72	73	86	75	68	68	65
1002	71	67	78	77	74	64	68
1009	70	48	68	67	67	66	80
1016	63	92	89	92	110	133	159
1023	178	157	128	107	92	73	83
1030	73	75	65	75	72	71	65
1037	62	71	62	71	74	61	63
1044	67	64	67	65	60	80	57
1051	67	73	59	58	65	65	63
1058	73	54	57	81	74	87	89
1065	63	70	73	80	54	58	60

CNTS/MICROGRAM COPPER   320.96

COPPER IN STANDARD   .078%
CENTROID CHANNEL   1023
HALF-LIFE CU-64   768 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
   LN2=.69315

   AVG.   CNTS/UG COPPER   318.76

FBI LAB WASHINGTON DC

EXPERIMENT 1 31DEC79 0908:37

91119065 RF   PB   5626A

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0559:56   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   612 SEC   VOLUME   UG   8700.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   1080   82   74   82   89   85   78   85
   1087   60   85   95   73   97   100   84
   1094   79   84   94   77   80   92   81
   1101   89   87   92   99   100   93   74
   1108   93   99   95   103   79   99   87
   1115   106   114   129   119   154   145   147
   1122   182   178   346   854   2339   6249   11711
   1129   16015   14845   9585   4191   1140   253   46
   1136   24   25   25   20   28   26   24
   1143   24   24   18   20   16   20   21
   1150   17   22   13   17   16   22   27
   1157   27   18   14   10   25   18   22
   1164   14   15   24   15   25   22   18
   1171   17   13   11   17   19   28   18

CNTS/MICROGRAM ANTIMONY   206.95

ANTIMONY IN STANDARD   .72%
CENTROID CHANNEL   1129
HALF-LIFE SB-122   4032 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
   LN2=.69315

EXPERIMENT 1   31DEC79 0909:46

91119065 RF   PB   S626B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0610:21	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	611 SEC	VOLUME	UG 8532.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

1080	77	91	66	98	105	92	66
1087	74	75	80	81	78	80	75
1094	85	81	75	82	77	86	85
1101	108	89	75	96	92	77	97
1108	96	94	91	94	92	84	92
1115	107	101	129	130	142	139	166
1122	157	214	320	781	2357	6064	11404
1129	15511	14568	9287	3954	1141	236	55
1136	37	33	31	26	17	29	27
1143	17	18	18	23	18	22	22
1150	16	21	16	10	13	18	13
1157	22	17	24	15	11	24	27
1164	18	16	25	13	14	27	24
1171	13	21	13	15	17	13	11

CNTS/MICROGRAM ANTIMONY   205.71

ANTIMONY IN STANDARD	.72%
CENTROID CHANNEL	1129
HALF-LIFE SB-122	4032 MIN.
BACKGROUND SPACING	25
BACKGROUND CHANNELS	10
CONSTANTS:	
E=2.7183	
LN2=.69315	

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0910:53

91119065 RF              PB                    S626C

SAMPLE TIME          26DEC79 1027:00    LOCATION   AFFRI
ACQUISITION TIME     29DEC79 0620:46    TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1      0.250
ELAPSED TIME     610 SEC                VOLUME     UG        7649.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04    KEV/CH        0.500
                                        OFFSET        0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM                5    A =    2.000         SLOPE      0.500 E-3
SENSITIVITY        16    B =   10.000         OFFSET     4.500
LIBRARY NUMBER      1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO     8    ABUNDANCE LIMIT (%)  80.00

    1080      71       58       51       65       72       94       69
    1087      62       61       64       64       76       61       78
    1094      64       60       71       64       77       67       72
    1101      78       81       76       97       76       63       75
    1108      70       92       84       75       64       80      104
    1115      92       92      105      115      133      142      128
    1122     131      162      299      714     2106     5427    10274
    1129   13878    13016     8405     3676     1007      233       62
    1136      27       23       28       26       17       16       15
    1143      18       14       28       19       12       17       20
    1150      28       19        5       16       23       20        9
    1157      15       14       18       14       20       13       11
    1164      16       11       17       14       14       15       17
    1171      21       16       19       14       11       16       14


CNTS/MICROGRAM ANTIMONY          206.65



ANTIMONY IN STANDARD      .72%
CENTROID CHANNEL         1129
HALF-LIFE SB-122         4032 MIN.
BACKGROUND SPACING         25
BACKGROUND CHANNELS        10
CONSTANTS:
    E=2.7183
  LN2=.69315



AVG.    CNTS/UG ANTIMONY          206.44
```

FBI LAB WASHINGTON DC

EXPERIMENT 1 31DEC79 0911:51

91119065 RF   PB   S604A

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0631:10   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   627 SEC   VOLUME   UG   8009.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    1267   41   41   34   41   32   33   26
    1274   39   33   29   26   31   39   42
    1281   41   35   25   25   27   36   27
    1288   31   53   51   93   145   140   130
    1295   83   53   38   36   33   21   25
    1302   25   24   33   25   33   25   32
    1309   25   31   28   40   68   111   157
    1316   147   110   70   44   29   40   23
    1323   36   29   36   29   34   20   27
    1330   28   39   30   33   38   43   34
    1337   29   30   30   32   44   23   29
    1344   35   29   24   30   25   22   31
    1351   27   33   29   23   31   17   33
    1358   28   31   29   28   26   30   24

CNTS/MICROGRAM ARSENIC   37.35

ARSENIC IN STANDARD   .10%
CENTROID CHANNEL   1316
HALF-LIFE AS-76   1584 MIN.
BACKGROUND SPACING   10
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
    LN2=.69315

EXPERIMENT 1   31DEC79 0912:59

91119065 RF   PB   S604B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME	29DEC79 0641:51	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	637 SEC	VOLUME	UG	10333.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B =	10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25			
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00			

1266	53	51	48	47	57	45	44
1273	50	51	54	57	40	52	51
1280	46	49	49	46	49	38	32
1287	46	66	61	84	125	192	179
1294	157	134	70	49	42	46	39
1301	49	41	40	35	39	38	42
1308	44	44	50	48	66	107	185
1315	195	204	153	81	46	47	40
1322	39	34	30	40	35	40	43
1329	52	35	43	50	53	52	53
1336	43	47	45	57	56	51	48
1343	36	40	30	38	28	38	43
1350	48	48	33	35	36	41	37
1357	34	43	39	28	47	36	48

CNTS/MICROGRAM ARSENIC   42.47

ARSENIC IN STANDARD	.10%
CENTROID CHANNEL	1315
HALF-LIFE AS-76	1584 MIN.
BACKGROUND SPACING	10
BACKGROUND CHANNELS	10
CONSTANTS:	
E=2.7183	
LN2=.69315	

EXPERIMENT 1   31DEC79 0914:06

91119065 RF   PB   S604C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0652:41	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	629 SEC	VOLUME	UG 8036.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                             OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

1267	37	41	45	31	35	30	41
1274	38	42	47	40	45	40	50
1281	47	36	39	33	31	35	36
1288	33	40	67	91	149	146	137
1295	96	52	35	51	45	27	31
1302	36	28	38	24	30	29	20
1309	25	24	34	45	80	127	176
1316	160	131	71	48	20	34	34
1323	27	33	43	26	38	25	30
1330	35	39	43	35	37	29	33
1337	23	33	36	38	31	33	28
1344	35	34	28	37	36	27	29
1351	25	28	34	29	38	28	24
1358	27	31	30	25	33	26	39

CNTS/MICROGRAM ARSENIC   43.51

ARSENIC IN STANDARD   .10%
CENTROID CHANNEL   1316
HALF-LIFE AS-76   1584 MIN.
BACKGROUND SPACING   10
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2. 7183
    LN2=. 69315

AVG.   CNTS/UG ARSENIC   41.11

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0915:04

91119065 RF   PB   Q297A

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1214:20   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   647 SEC   VOLUME   UG   10980.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    994   365   344   303   368   371   339   308
   1001   322   314   326   337   325   349   342
   1008   344   316   308   314   330   331   302
   1015   314   307   319   341   350   361   447
   1022   447   440   391   426   343   361   319
   1029   287   315   283   319   296   286   282
   1036   289   299   282   295   282   283   289
   1043   281   310   285   298   300   287   292
PERCENT COPPER   .0268
   % RSD COUNTING   11.3
   1101   351   322   344   371   352   330   349
   1108   350   351   333   365   365   357   374
   1115   422   446   500   581   689   672   633
   1122   709   991   1753   4723   12419   28571   49150
   1129   61954   54739   33561   13923   4123   1105   428
   1136   276   242   216   184   170   157   170
   1143   159   146   127   115   112   121   119
   1150   117   106   103   103   102   94   92
PERCENT ANTIMONY   1.8652
   % RSD COUNTING   .2
   1287   46   57   59   105   163   205   251
   1294   198   155   85   49   60   58   53
   1301   53   51   57   54   46   58   40
   1308   52   65   58   46   49   57   72
   1315   83   71   68   62   44   57   56
   1322   33   63   42   52   62   54   57
   1329   48   40   58   43   62   49   48
   1336   61   51   67   63   65   42   64
PERCENT ARSENIC   .0075
   % RSD COUNTING   31.2
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0916:58

91119065 RF   PB   Q297B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1225:20   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   641 SEC   VOLUME   UG   8874.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

995	286	302	279	289	261	307	295
1002	273	283	266	292	280	297	282
1009	294	298	278	288	250	251	283
1016	258	265	272	304	339	354	422
1023	376	368	331	313	301	271	264
1030	265	243	245	266	278	250	267
1037	242	272	251	293	282	230	283
1044	273	230	250	272	269	247	284

PERCENT COPPER   .0303
   % RSD COUNTING   11.6

1101	269	304	288	307	307	271	320
1108	317	306	326	345	321	359	326
1115	359	386	420	485	535	561	557
1122	603	801	1502	3898	10377	24134	42607
1129	54614	48543	29622	12412	3762	890	323
1136	249	204	155	154	151	114	102
1143	100	116	112	91	92	95	103
1150	85	81	80	87	90	73	98

PERCENT ANTIMONY   2.0214
   % RSD COUNTING   .2

1285	34	52	50	60	64	84	145
1292	175	210	171	116	77	68	55
1299	53	34	42	46	44	46	43
1306	55	44	34	30	47	54	50
1313	57	64	64	68	43	49	40
1320	48	51	41	33	35	48	49
1327	41	41	40	51	44	39	38
1334	43	38	47	41	49	57	53

PERCENT ARSENIC   .0105
   % RSD COUNTING   25.5

CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1313   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY 206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC 10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 0918:52

91119065 RF   PB   Q297C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 1236:14	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	640 SEC	VOLUME	UG 8745.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25			
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00			

995	295	275	302	300	274	296	268
1002	294	294	279	298	264	267	276
1009	267	264	271	266	291	270	297
1016	284	289	257	294	334	334	398
1023	376	350	359	301	283	263	249
1030	266	281	253	267	256	245	242
1037	249	274	270	264	235	274	254
1044	264	279	269	263	227	264	256

PERCENT COPPER   .0296
    % RSD COUNTING   12.1

1101	277	290	276	314	286	315	287
1108	301	317	315	276	331	316	321
1115	363	389	457	514	550	568	526
1122	610	783	1491	3907	10522	24519	42965
1129	53792	47327	28591	11958	3585	894	348
1136	212	195	147	145	126	114	110
1143	92	103	102	94	107	74	92
1150	101	68	72	72	76	79	76

PERCENT ANTIMONY   2.0309
    % RSD COUNTING   .2

1288	48	59	79	135	152	195	170
1295	105	63	61	58	52	59	57
1302	43	34	43	33	42	34	49
1309	41	46	36	40	57	74	70
1316	60	62	57	45	40	49	38
1323	32	46	52	48	30	40	46
1330	41	36	47	54	36	42	37
1337	50	53	52	57	46	47	37

PERCENT ARSENIC   .0138
    % RSD COUNTING   20.1

CENTROID CHANNEL	COPPER	1023	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1316		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43		COPPER	25
	ARSENIC	41.10		ANTIMONY	25

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0920:46

91119065 RF              PB                        0298A

SAMPLE TIME           26DEC79 1027:00    LOCATION    AFFRI
ACQUISITION TIME      28DEC79 1247:07    TYPE        COR 5M
PRESET TIME      600 SEC                 GEOMETRY    SHELF 1        0.250
ELAPSED TIME     637 SEC                 VOLUME      UG        12131.000
LIVE TIME        600 SEC                 DETECTOR    GELI 15

CALIBRATION DATE      28DEC79 0952:04    KEV/CH          0.500
                                         OFFSET          0.546

                      NORMALIZATION CONSTANTS    GAMMA
FWHM               5   A =     2.000        SLOPE        0.500 E-3
SENSITIVITY       16   B =    10.000        OFFSET       4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE       1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%)   80.00

   995      281      278      274      240      253      267      250
  1002      256      247      233      255      290      270      276
  1009      245      256      235      276      264      240      242
  1016      260      242      264      259      338      364      377
  1023      358      333      331      287      268      245      235
  1030      223      230      233      232      241      232      247
  1037      240      230      224      252      241      233      231
  1044      239      239      240      251      232      228      231
PERCENT COPPER                              .0254
  % RSD COUNTING        10.0
  1101      269      262      276      291      268      298      270
  1108      268      256      289      290      277      295      285
  1115      315      332      367      405      486      473      487
  1122      544      698     1390     3663     9653    22386    39498
  1129    50084    43911    26631    11139     3289      817      288
  1136      182      160      146      134      124      105       94
  1143      101       99       84       83       79       74       88
  1150       84       75       71       60       82       64       64
PERCENT ANTIMONY                            1.3574
  % RSD COUNTING         .2
  1288       45       54       78      127      181      157      155
  1295      123       64       46       55       36       38       38
  1302       29       36       32       34       40       40       30
  1309       41       40       48       39       34       59       50
  1316       47       61       47       47       50       39       43
  1323       35       40       33       31       38       33       35
  1330       35       36       43       44       33       40       45
  1337       42       46       40       45       40       31       28
PERCENT ARSENIC                             .0074
  % RSD COUNTING        24.4
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129             SB-122  4043 MIN.
                 ARSENIC       1316             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER       318.75   BACKGROUND SPACING:
                 ANTIMONY     206.43      COPPER    25
                 ARSENIC       41.10      ANTIMONY  25
CONSTANTS:                                ARSENIC   10
  E=2.7183                             BACKGROUND CHANNELS 10
  LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0922:40

91119065 RF   PB   0298B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1257:57   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   645 SEC   VOLUME   UG   10371.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

995	338	333	308	322	293	316	274
1002	316	302	308	324	311	289	311
1009	302	310	300	301	310	310	298
1016	302	304	338	339	393	400	402
1023	416	382	352	341	324	315	282
1030	303	313	260	321	282	299	268
1037	284	290	292	309	289	313	321
1044	303	303	274	282	315	287	288

PERCENT COPPER   .0268
    % RSD COUNTING   12.0

1101	318	331	296	375	358	310	317
1108	384	319	349	351	339	375	358
1115	384	434	468	580	614	603	562
1122	661	974	1814	4874	12757	28736	49071
1129	60326	51883	30621	12375	3654	912	381
1136	272	225	178	171	175	157	159
1143	123	151	130	119	130	97	108
1150	85	99	80	102	107	112	81

PERCENT ANTIMONY   1.9225
    % RSD COUNTING   .2

1287	50	64	75	85	148	218	238
1294	181	136	91	60	54	53	58
1301	47	40	46	51	40	53	53
1308	48	51	40	53	52	55	56
1315	67	58	76	62	43	55	47
1322	34	52	56	58	56	43	52
1329	49	51	47	61	46	52	51
1336	46	59	59	57	60	62	44

PERCENT ARSENIC   .0062
    % RSD COUNTING   39.7

CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY 206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
  E=2.7183   BACKGROUND CHANNELS 10
  LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0924:34

91119065 RF   PB   0298C

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1308:55   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   639 SEC   VOLUME   UG   8789.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   994   275   270   276   266   284   275   267
  1001   287   298   278   249   267   285   234
  1008   274   276   273   272   250   292   262
  1015   248   266   266   308   288   317   347
  1022   331   340   387   337   283   267   229
  1029   276   250   240   258   250   263   261
  1036   235   254   236   266   234   252   241
  1043   221   236   261   262   256   228   249
PERCENT COPPER   .0283
   % RSD COUNTING   12.7
  1101   278   309   310   268   287   310   301
  1108   299   303   288   272   329   276   304
  1115   356   348   422   509   543   519   511
  1122   575   797   1508   3940   10849   24801   42744
  1129   53026   45359   27293   11181   3176   828   307
  1136   200   164   139   119   117   115   114
  1143   115   92   117   102   82   85   82
  1150   86   92   82   76   75   54   54
PERCENT ANTIMONY   1.9910
   % RSD COUNTING   .2
  1288   49   56   101   127   181   199   177
  1295   115   70   57   52   47   48   44
  1302   61   37   41   46   29   30   40
  1309   47   39   31   37   43   59   54
  1316   55   52   53   38   39   47   50
  1323   36   37   53   43   47   36   33
  1330   40   42   26   36   36   38   48
  1337   45   46   49   53   54   28   34
PERCENT ARSENIC   .0076
   % RSD COUNTING   34.7
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0926:28

91119065 RF   PB   0363A

```
SAMPLE TIME           26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME      28DEC79 1319:47   TYPE       COR 5M
PRESET TIME       600 SEC               GEOMETRY   SHELF 1        0.250
ELAPSED TIME      614 SEC               VOLUME     UG          8351.000
LIVE TIME         600 SEC               DETECTOR   GELI 15

CALIBRATION DATE      28DEC79 0952:04   KEV/CH         0.500
                                        OFFSET         0.546

                    NORMALIZATION CONSTANTS    GAMMA
FWHM                 5    A =    2.000         SLOPE        0.500 E-3
SENSITIVITY         16    B =   10.000         OFFSET       4.500
LIBRARY NUMBER       1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO      8    ABUNDANCE LIMIT (%)  80.00

    995       92       84       94       99       85       93       96
   1002      127      111       95       95      103       87       89
   1009       87      100       89       95      101      101      124
   1016      128      116      155      190      283      367      449
   1023      455      390      320      245      163      123      118
   1030      109       93      100       74       86       91       98
   1037       93      105       78       83      100       99       93
   1044       87       72       81       87       90       89       96
```

PERCENT COPPER   .1115
   % RSD COUNTING   2.9

```
   1101       99      100      108      113      109      108       89
   1108      101      119      138       88      102      124      106
   1115      129      173      226      339      456      452      392
   1122      263      263      384      987     2722     6974    13586
   1129    18374    17402    11039     4612     1309      294       72
   1136       39       36       39       36       28       28       22
   1143       27       35       26       20       29       26       22
   1150       25       28       26       17       26       24       18
```

PERCENT ANTIMONY   .7285
   % RSD COUNTING   .3

```
   1287       20       14       10       24       31       51       75
   1294       58       32       21       17       17       15        8
   1301       14        8       17       15        8       14       12
   1308       15       19       10       16       20       29       32
   1315       50       48       43       25       17       17       11
   1322       10        7        9       13       15      , 9        6
   1329       12       10       18       14       18       10       12
   1336       17       15       10       15       21       14       13
```

PERCENT ARSENIC   .0181
   % RSD COUNTING   11.1

```
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129             SB-122  4043 MIN.
                 ARSENIC       1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      318.75   BACKGROUND SPACING:
                 ANTIMONY    206.43      COPPER    25
                 ARSENIC      41.10      ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 0928:22

91119065 RF   PB   Q363B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME	28DEC79 1330:14	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	618 SEC	VOLUME	UG	10731.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

995	136	116	137	122	85	152	147
1002	143	131	129	118	135	136	123
1009	139	132	134	100	126	108	134
1016	132	162	199	256	341	490	555
1023	562	583	413	306	232	160	133
1030	128	143	96	110	113	127	125
1037	112	114	90	114	108	102	119
1044	115	95	125	117	114	109	105

PERCENT COPPER   .1129
   % RSD COUNTING   2.6

1101	137	139	121	127	151	138	144
1108	133	142	141	129	138	131	141
1115	168	215	303	465	545	593	448
1122	367	303	584	1326	3802	9330	17824
1129	23774	22075	13772	5622	1643	345	88
1136	68	48	40	52	42	35	37
1143	42	36	19	24	40	24	24
1150	20	24	24	30	38	26	27

PERCENT ANTIMONY   .7314
   % RSD COUNTING   .3

1287	27	18	19	43	49	64	85
1294	85	62	32	23	17	30	23
1301	17	17	15	18	18	14	18
1308	14	20	17	23	21	41	49
1315	67	59	51	30	18	16	20
1322	10	14	14	22	10	16	20
1329	9	19	21	19	16	27	24
1336	15	16	17	18	18	15	14

PERCENT ARSENIC   .0179
   % RSD COUNTING   10.0

CENTROID CHANNEL COPPER	1023	HALF-LIFE CU-64	768 MIN.	
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183		BACKGROUND CHANNELS 10		
LN2=.69315				

EXPERIMENT 1   31DEC79 0930:15

91119065 RF   PB   0363C

```
SAMPLE TIME           26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME      28DEC79 1340:45   TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1      0.250
ELAPSED TIME     615 SEC                VOLUME     UG        9141.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE      28DEC79 0952:04   KEV/CH         0.500
                                        OFFSET         0.546
```

```
                      NORMALIZATION CONSTANTS    GAMMA
FWHM               5   A =    2.000            SLOPE        0.500 E-3
SENSITIVITY       16   B =   10.000            OFFSET       4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%)  80.00
```

```
   995    127    123    120    110    111    128    115
  1002    118    117    109    121     88     94    102
  1009    119    115     96    106     96     80    101
  1016    107    137    196    217    306    376    484
  1023    473    437    325    280    179    154    119
  1030     76     98    102     89     80     92     75
  1037    102     98     94    104     90    109     78
  1044     97     90    108     90     95     88     86
```
PERCENT COPPER   .1071
```
   % RSD COUNTING      3.0
  1101    142    101    102    132    117    142    102
  1108    131     97     98    122    130    134    145
  1115    141    176    265    431    540    536    372
  1122    305    287    454   1133   3157   8003  15116
  1129  20463  18876  11710   4757   1361    277     65
  1136     48     52     47     35     30     29     25
  1143     16     33     24     31     29     30     22
  1150     33     24     20     34     24     27     23
```
PERCENT ANTIMONY   .7338
```
   % RSD COUNTING       .3
  1288     12     15     29     39     56     79     67
  1295     37     31     16     20     10     16     12
  1302     23     14     10     10     19     12     14
  1309     14     17     17     15     27     39     61
  1316     59     45     30     17     14     16     11
  1323     10     14     13     12     14     17     12
  1330     12     16     21     15     13     19     21
  1337     15      8     22     24     23     19     17
```
PERCENT ARSENIC   .0187
```
   % RSD COUNTING      10.5
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY    1129             SB-122   4043 MIN.
                 ARSENIC     1316             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     318.75  BACKGROUND SPACING:
                 ANTIMONY   206.43     COPPER    25
                 ARSENIC     41.10     ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 0932:09

91119065 RF   PB   Q364A

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 1351:14	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	617 SEC	VOLUME	UG 9664.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                 NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

995	121	113	120	141	123	110	109
1002	117	128	123	121	111	112	108
1009	114	127	96	102	109	101	121
1016	112	139	124	133	143	182	169
1023	197	159	158	143	130	110	111
1030	91	115	120	98	90	117	121
1037	130	105	105	97	101	123	99
1044	104	95	94	109	112	117	90

PERCENT COPPER   .0190
    % RSD COUNTING   12.2

1101	130	120	120	118	128	123	117
1108	136	156	126	149	127	140	151
1115	162	182	295	467	630	594	460
1122	338	304	548	1313	3685	9033	16719
1129	22461	20713	12975	5548	1643	342	93
1136	56	51	46	39	43	28	31
1143	26	32	35	29	25	26	36
1150	37	31	32	32	27	29	23

PERCENT ANTIMONY   .7724
    % RSD COUNTING   .3

1288	15	22	29	31	80	86	58
1295	59	40	20	27	12	21	17
1302	15	17	9	11	14	15	19
1309	9	16	15	27	28	38	52
1316	57	55	26	34	20	14	18
1323	11	14	18	12	16	10	25
1330	11	15	18	20	22	14	14
1337	12	23	35	19	23	15	18

PERCENT ARSENIC   .0188
    % RSD COUNTING   10.1

CENTROID CHANNEL	COPPER	1023	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1316		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43	COPPER	25	
	ARSENIC	41.10	ANTIMONY	25	

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0934:03

91119065 RF   PB   Q364B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1401:44   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   618 SEC   VOLUME   UG   9606.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                            OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    994   113   132   113   121   130   139   144
   1001   114   129   130   123   131   138   112
   1008   124   118   143   116   127   97   119
   1015   118   118   103   105   150   159   184
   1022   185   196   180   144   133   118   121
   1029   110   121   101   102   106   135   111
   1036   100   118   100   103   109   90   134
   1043   99   108   115   126   113   98   121
PERCENT COPPER   .0188
   % RSD COUNTING   12.8
   1101   116   120   126   118   128   124   126
   1108   131   134   125   155   157   172   156
   1115   183   207   301   492   637   586   445
   1122   338   346   537   1317   3669   8950   17241
   1129   23276   21764   13735   5810   1698   376   93
   1136   62   51   45   38   48   47   28
   1143   46   26   35   31   30   31   26
   1150   29   29   35   34   33   39   29
PERCENT ANTIMONY   .8066
   % RSD COUNTING   .3
   1288   18   25   41   62   62   80   78
   1295   49   42   21   18   14   17   25
   1302   15   18   23   17   9   16   19
   1309   13   17   18   23   31   52   53
   1316   80   70   24   31   23   13   19
   1323   16   15   20   13   17   17   20
   1330   19   27   15   23   15   15   23
   1337   11   10   20   23   24   18   10
PERCENT ARSENIC   .0220
   % RSD COUNTING   9.5
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

91119065 RF   PB   Q364C

SAMPLE TIME	26DEC79 1027:00	LOCATION AFFRI
ACQUISITION TIME	28DEC79 1412:15	TYPE COR 5M
PRESET TIME 600 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 617 SEC		VOLUME UG 9889.000
LIVE TIME 600 SEC		DETECTOR GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

996	129	118	139	115	117	131	111
1003	103	132	118	101	116	118	119
1010	104	133	115	112	98	118	117
1017	122	121	136	137	163	175	195
1024	196	168	145	141	100	115	97
1031	107	106	124	111	100	93	114
1038	100	91	99	116	103	106	122
1045	114	111	91	100	113	100	121

PERCENT COPPER   .0200
    % RSD COUNTING   11.6

1101	112	117	130	113	138	111	122
1108	135	127	129	133	139	151	163
1115	133	225	307	515	584	580	438
1122	328	338	530	1255	3541	8942	16862
1129	23139	21416	13611	5909	1701	369	95
1136	46	38	39	41	44	39	33
1143	43	27	37	29	29	30	26
1150	26	28	25	41	20	24	27

PERCENT ANTIMONY   .7767
    % RSD COUNTING   .3

1288	23	20	31	40	73	88	78
1295	58	31	21	20	27	23	12
1302	16	17	20	11	17	18	20
1309	14	14	24	14	46	61	80
1316	77	40	30	21	14	18	19
1323	12	13	13	10	14	14	14
1330	12	24	19	22	16	21	14
1337	22	32	24	22	24	18	14

PERCENT ARSENIC   .0239
    % RSD COUNTING   8.5

CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0937:50

91119065 RF   PB   Q365A

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1422:46   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   616 SEC   VOLUME   UG   9890.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

     995   119   114   132   117   114   104   120
    1002   109   131   117   106   108   101   113
    1009   106   118   127   108   116   110   117
    1016   111   134   173   186   286   394   451
    1023   445   408   367   275   209   142   106
    1030   117   104   85   102   104   107   105
    1037   96   93   110   97   88   109   96
    1044   90   99   117   96   92   115   113
PERCENT COPPER   .0978
   % RSD COUNTING   3.1
    1101   111   112   135   105   113   121   138
    1108   138   122   136   109   125   124   133
    1115   123   182   270   423   489   496   396
    1122   281   276   409   1099   3103   7935 15364
    1129 20938 19700 12887   5453   1597   393   75
    1136   51   32   42   45   36   30   37
    1143   23   26   37   26   32   23   24
    1150   28   22   21   20   28   24   25
PERCENT ANTIMONY   .7108
   % RSD COUNTING   .3
    1287   17   19   20   25   45   67   96
    1294   72   45   25   29   13   16   23
    1301   12   13   16   10   19   11   12
    1308   15   13   12   8   21   33   43
    1315   49   60   40   33   18   21   15
    1322   20   18   13   14   13   11   20
    1329   16   14   28   16   13   16   13
    1336   13   16   10   20   28   27   16
PERCENT ARSENIC   .0176
   % RSD COUNTING   10.5
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 0939:44

91119065 RF   PB   Q365B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 1433:15	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	616 SEC	VOLUME	UG 9449.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

995	114	108	121	96	90	105	102
1002	120	102	104	96	117	127	119
1009	90	126	112	108	121	101	105
1016	106	143	157	213	265	368	431
1023	449	410	360	255	187	149	126
1030	124	129	95	95	95	95	112
1037	102	94	104	104	89	109	83
1044	99	104	85	92	112	96	98

PERCENT COPPER   .1028
% RSD COUNTING   3.1

1101	123	102	130	112	102	132	115
1108	148	126	115	131	112	123	145
1115	126	166	242	400	496	475	385
1122	324	307	443	1127	3286	8015	15727
1129	21138	19652	12312	5228	1473	313	78
1136	58	43	47	25	38	23	30
1143	29	28	28	32	32	30	22
1150	32	35	29	22	32	19	24

PERCENT ANTIMONY   .7452
% RSD COUNTING   .3

1288	15	16	21	45	55	80	65
1295	57	33	23	16	16	19	15
1302	17	16	17	14	15	12	12
1309	23	18	13	19	17	45	49
1316	47	34	27	23	18	15	17
1323	19	13	20	20	19	13	16
1330	12	20	15	22	12	24	18
1337	8	13	18	21	21	9	15

PERCENT ARSENIC   .0135
% RSD COUNTING   14.0

CENTROID CHANNEL	COPPER	1023	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1316		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43		COPPER	25
	ARSENIC	41.10		ANTIMONY	25
CONSTANTS:				ARSENIC	10
E=2.7183			BACKGROUND CHANNELS	10	
LN2=.69315					

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0941:38

91119065 RF   PB   0365C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 1443:44	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	616 SEC	VOLUME	UG 9631.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

995	108	132	99	92	95	106	96
1002	99	108	105	102	103	106	105
1009	108	107	98	92	121	99	132
1016	118	131	147	243	269	352	417
1023	433	405	321	258	185	127	114
1030	109	102	101	103	101	116	107
1037	109	102	92	81	105	97	116
1044	94	84	99	88	113	93	79

PERCENT COPPER   .0975
   % RSD COUNTING   3.1

1101	123	89	99	94	128	123	130
1108	105	130	109	120	131	133	116
1115	128	182	252	375	490	435	376
1122	285	272	461	1079	3245	8001	15387
1129	20821	19044	11902	4931	1503	300	97
1136	35	40	36	29	37	31	25
1143	35	32	28	22	33	25	24
1150	22	26	14	25	25	24	25

PERCENT ANTIMONY   .7153
   % RSD COUNTING   .3

1288	17	16	25	45	65	88	64
1295	62	23	16	15	13	16	15
1302	16	10	15	14	15	18	14
1309	16	15	16	16	30	26	50
1316	44	36	31	21	15	16	12
1323	10	14	13	19	13	13	26
1330	12	12	16	16	13	18	16
1337	22	17	20	21	21	13	14

PERCENT ARSENIC   .0134
   % RSD COUNTING   13.7

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

EXPERIMENT 1   31DEC79 0943:32

91119065 RF   PB   Q366A

SAMPLE TIME		26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME		28DEC79 1454:13	TYPE	COR 5M	
PRESET TIME	600 SEC		GEOMETRY	SHELF 1	0.250
ELAPSED TIME	612 SEC		VOLUME	UG	7741.000
LIVE TIME	600 SEC		DETECTOR	GELI 15	

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

994	84	75	103	73	94	98	96
1001	85	90	80	88	87	82	103
1008	75	77	88	70	75	83	88
1015	72	83	86	84	104	94	116
1022	122	122	125	106	90	80	75
1029	99	51	69	83	87	67	74
1036	78	90	74	76	73	67	71
1043	80	79	78	92	78	78	72

PERCENT COPPER   .0139

% RSD COUNTING   18.5

1101	87	76	111	103	79	115	96
1108	79	80	107	117	94	109	93
1115	99	148	230	335	421	435	331
1122	252	232	365	780	2375	6318	11812
1129	16253	15388	9641	3975	1223	230	55
1136	32	31	20	21	21	12	18
1143	27	21	17	19	24	21	26
1150	11	21	19	22	8	13	18

PERCENT ANTIMONY   .7032

% RSD COUNTING   .3

1287	10	19	14	16	39	50	61
1294	56	46	23	7	18	14	16
1301	13	17	12	11	15	8	9
1308	10	10	12	11	20	23	31
1315	48	49	28	24	15	17	11
1322	12	10	8	4	6	11	11
1329	14	13	14	10	16	10	13
1336	13	18	12	10	14	14	13

PERCENT ARSENIC   .0196

% RSD COUNTING   10.8

CENTROID CHANNEL	COPPER	1022	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1315		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43	COPPER	25	
	ARSENIC	41.10	ANTIMONY	25	

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0945:25

91119065 RF   PB   Q366B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1504:38   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   613 SEC   VOLUME   UG   8347.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                            OFFSET   0.546

                         NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   ·OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

      995   115   74   94   79   91   94   89
     1002   104   89   95   82   105   87   87
     1009   97   84   88   90   102   89   81
     1016   96   85   79   101   102   121   125
     1023   148   134   120   109   88   78   93
     1030   84   97   82   84   85   74   80
     1037   66   68   62   58   67   77   83
     1044   85   78   79   82   78   94   88
PERCENT COPPER   .0170
   % RSD COUNTING   14.5
     1101   95   91   95   83   101   115   103
     1108   99   92   106   113   105   109   103
     1115   116   138   242   363   444   465   370
     1122   250   251   451   926   2768   6975   13179
     1129   17486   16271   10217   4281   1140   282   59
     1136   41   31   30   29   29   35   21
     1143   28   27   25   24   19   19   17
     1150   23   24   23   19   24   21   22
PERCENT ANTIMONY   .7072
   % RSD COUNTING   .3
     1288   21   10   24   30   51   65   65
     1295   52   26   16   22   11   4   13
     1302   11   16   11   10   17   12   12
     1309   12   10   12   12   24   30   52
     1316   43   36   19   18   12   13   16
     1323   14   10   12   7   10   12   14
     1330   12   17   8   11   13   9   12
     1337   15   11   18   13   18   13   10
PERCENT ARSENIC   .0166
   % RSD COUNTING   12.1
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY   25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0947:19

91119065 RF   PB   Q366C

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1515:04   TYPE   CDR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   613 SEC   VOLUME   UG   8524.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

   995   93   87   89   88   80   101   95
  1002   96   94   99   77   113   90   96
  1009   81   86   75   86   83   85   89
  1016   86   82   85   102   101   135   118
  1023   143   111   147   120   97   108   91
  1030   71   70   78   71   95   100   82
  1037   78   85   71   81   103   91   86
  1044   88   97   73   97   88   84   76
PERCENT COPPER: .0174
   % RSD COUNTING   14.1
  1101   96   105   91   99   91   96   101
  1108   114   101   109   100   109   106   119
  1115   117   154   260   345   500   453   346
  1122   250   238   371   950   2819   6893   13206
  1129   17801   16160   10150   4294   1194   215   71
  1136   34   32   37   32   31   30   18
  1143   13   22   15   28   26   25   17
  1150   27   17   17   20   21   30   18
PERCENT ANTIMONY'   .6953
   % RSD COUNTING   .3
  1287   13   20   20   33   36   57   72
  1294   57   45   18   25   16   16   12
  1301   12   14   11   10   11   10   14
  1308   14   12   18   13   20   32   31
  1315   63   54   37   23   14   10   13
  1322   14   9   14   13   11   5   13
  1329   11   11   13   17   17   18   25
  1336   6   22   10   14   17   14   13
PERCENT ARSENIC: .0210
   % RSD COUNTING   9.9
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0949:13

91119065 RF              PB                      Q367A

SAMPLE TIME          26DEC79 1027:00    LOCATION    AFFRI
ACQUISITION TIME     28DEC79 1525:30    TYPE        COR 5M
PRESET TIME      600 SEC                GEOMETRY    SHELF 1      0.250
ELAPSED TIME     618 SEC                VOLUME      UG       10646.000
LIVE TIME        600 SEC                DETECTOR    GELI 15

CALIBRATION DATE     28DEC79 0952:04    KEV/CH          0.500
                                        OFFSET          0.546

                     NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =     2.000        SLOPE        0.500 E-3
SENSITIVITY       16    B =    10.000        OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    995     129     127     137     117     119     107     112
   1002     109     114     133     125     141     126     134
   1009     140     104     126     139     130     131     135
   1016     137     139     146     216     297     395     465
   1023     557     438     333     267     201     145     131
   1030     136      97     101     121     106      98     108
   1037     109     135      96     113     112     110      96
   1044     105     102     110     114     119     117     115
PERCENT  COPPER                    .1003
   % RSD COUNTING       3.1
   1101     122     134     131     142     122     121     146
   1108     136     123     137     129     160     136     135
   1115     161     204     302     478     496     569     412
   1122     329     379     597    1365    4049    9899   18311
   1129   24002   21384   13122    5340    1488     338      97
   1136      66      53      46      51      39      39      42
   1143      36      22      40      41      29      43      38
   1150      31      31      25      26      35      38      25
PERCENT  ANTIMONY                  .7514
   % RSD COUNTING        .3
   1287      20      26      25      34      58      72      87
   1294      81      59      35      16      22      17      17
   1301      20      17      13      13      19      13      14
   1308      19      21      11      24      25      38      47
   1315      55      52      42      45      15      14      16
   1322      11      26      18      20      23      14      20
   1329      25      22      22      17      13      12      14
   1336      16      17      25      24      15      22       7
PERCENT  ARSENIC                   .0168
   % RSD COUNTING      11.2
CENTROID CHANNEL COPPER        1023    HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129              SB-122  4043 MIN.
                 ARSENIC       1315              AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      318.75    BACKGROUND SPACING:
                 ANTIMONY    206.43       COPPER    25
                 ARSENIC      41.10       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0951:07

91119065 RF   PB   Q367B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1536:01   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   617 SEC   VOLUME   UG   9660.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   994   130   115   113   114   93   115   131
  1001   121   120   101   105   133   111   122
  1008   139   108   110   121   116   118   122
  1015   117   150   123   153   237   285   385
  1022   435   451   411   327   229   185   146
  1029   108   112   107   111   89   101   99
  1036   106   102   91   100   115   96   104
  1043   100   114   104   87   109   112   106
PERCENT COPPER   .1034
   % RSD COUNTING   3.2
  1101   109   117   126   132   128   120   133
  1108   138   129   119   123   137   113   164
  1115   156   191   312   392   491   484   394
  1122   287   311   548   1260   3644   8916   16786
  1129   21726   19788   12268   5010   1433   302   93
  1136   51   47   51   38   45   39   35
  1143   29   43   27   43   32   31   27
  1150   36   23   28   29   25   29   26
PERCENT ANTIMONY   .7607
   % RSD COUNTING   .3
  1287   18   26   17   31   46   77   73
  1294   67   60   23   13   24   15   18
  1301   20   14   18   10   12   19   17
  1308   17   14   17   19   19   34   38
  1315   48   44   47   26   17   10   9
  1322   21   26   15   20   26   20   16
  1329   11   11   15   23   19   8   21
  1336   18   18   15   23   23   21   20
PERCENT ARSENIC   .0130
   % RSD COUNTING   15.3
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                  ANTIMONY   1129   SB-122 4043 MIN.
                  ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75 BACKGROUND SPACING:
                  ANTIMONY   206.43   COPPER   25
                  ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0953:00

91119065 RF   PB   0367C

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1546:31   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   616 SEC   VOLUME   UG   9589.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

   995   116   106   120   120   103   119   131
  1002   132   110   118   115   110   104   112
  1009   140   100   116   110   131   115   125
  1016   129   135   167   225   275   338   416
  1023   460   454   306   259   182   143   106
  1030   103   112   122   104   98   112   103
  1037   99   107   110   96   88   74   98
  1044   108   83   90   103   93   87   115
PERCENT COPPER   .1043
  % RSD COUNTING   3.2
  1101   135   98   116   103   131   137   102
  1108   121   129   114   119   118   130   156
  1115   162   186   248   404   552   434   340
  1122   282   320   477   1231   3475   8502   16290
  1129   21551   19768   12232   5002   1439   313   77
  1136   53   44   44   44   33   34   40
  1143   36   32   31   21   18   23   26
  1150   29   24   23   33   23   24   22
PERCENT ANTIMONY   .7564
  % RSD COUNTING   .3
  1287   13   17   13   20   51   53   60
  1294   77   41   39   23   16   22   22
  1301   12   10   12   16   18   14   15
  1308   18   13   12   16   27   23   49
  1315   55   62   38   29   25   16   15
  1322   17   17   15   16   15   9   15
  1329   9   15   24   11   17   12   17
  1336   13   13   17   17   19   17   11
PERCENT ARSENIC   .0185
  % RSD COUNTING   16.3
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY 206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS.   ARSENIC   10
   E=2.7182   BACKGROUND CHANNELS 10
   LN2=.6931

```
PBT LAB ORGANIZATION DC

INSTRUMENT 1    11DEC79 0954:54

SAMPLE NO.         PB                        Q368A

SAMPLE TIME        26DEC79 1027 00    LOCATION   AFFRI
NORMALIZATION TIME 28DEC79 1757.00    TYPE       COR 5M
PRESET TIME        600 SEC            GEOMETRY   SHELF 1      0.250
ELAPSED TIME       600 SEC            VOLUME     UG       11212.000
LIVE TIME          600 SEC            DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04    KEV/CH       0.500
                                      OFFSET       0.546

                   NORMALIZATION CONSTANTS   GAMMA
FWHM              5    A =    2.000          SLOPE       0.500 E-3
SENSITIVITY      16    B =   10.000          OFFSET      4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE    1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00


   995      5      4      2      3      1      1      1
  1002      2      2      5      1      3      3      2
  1009      4      0      0      1      1      2      2
  1016      2      4      5      8      9     12     16
  1023     23     12     12     11      4      3      3
  1030      3      3      2      1      4      1      0
  1037      1      3      2      0      4      1      0
  1044      0      4      1      4      1      1      0
PERCENT  COPPER                     .0041
  % RSD COUNTING     12.5
  1100      4      1      0      0      5      2      2
  1107      1      2      2      1      2      2      3
  1114      3      3      2      0      1      2      4
  1121      3      0      0      2      2      4      5
  1128      1      4      9      3      0      1      2
  1135      3      1      3      0      2      1      3
  1142      5      1      0      1      3      1      3
  1149      0      2      3      4      0      1      2
PERCENT  ANTIMONY                   .0001
  % RSD COUNTING     33.1
  1288      1      1      2      1      0      1      1
  1295      1      1      3      1      2      4      0
  1302      0      1      0      3      0      0      0
  1309      1      1      1      1      0      3      2
  1316      7      0      5      2      1      2      1
  1323      0      1      0      2      2      0      1
  1330      3      0      3      1      0      1      1
  1337      0      2      1      2      1      0      1
PERCENT  ARSENIC                    .0011
  % RSD COUNTING     37.0
CENTROID CHANNEL  COPPER     1023   HALF-LIFE CU-64    768 MIN.
                  ANTIMONY   1128             SB-122  4043 MIN.
                  ARSENIC    1316             AS-76   1584 MIN.
COUNTS/MICROGRAM  COPPER    318.75  BACKGROUND SPACING:
                  ANTIMONY  206.43     COPPER    25
                  ARSENIC    41.10     ANTIMONY  25
CONSTANTS.                            ARSENIC   10
    E=2.7183                        BACKGROUND CHANNELS 10
    LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 0956:48

91119065 RF   FB   Q368B'

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1607:13   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   600 SEC   VOLUME   UG   10481.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                         NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

     994   1   0   2   1   0   2   1
    1001   2   1   1   2   1   3   2
    1008   2   1   3   2   1   2   1
    1015   4   3   3   3   9   12   16
    1022   17   16   14   12   6   6   6
    1029   3   4   4   3   2   2   2
    1036   3   2   3   2   3   0   4
    1043   1   0   2   4   1   6   2
PERCENT COPPER   .0045
    % RSD COUNTING   12.7
    1101   1   3   1   0   1   2   3
    1108   1   0   0   6   2   2   3
    1115   2   0   4   0   1   5   4
    1122   5   1   1   3   1   5   4
    1129   9   9   5   4   0   2   2
    1136   0   3   4   3   2   4   2
    1143   1   3   1   3   0   1   5
    1150   1   2   3   4   3   0   0
PERCENT ANTIMONY   .0002
    % RSD COUNTING   27.8
    1286   3   1   0   2   1   0   0
    1293   0   1   4   2   1   0   1
    1300   0   1   1   1   0   2   0
    1307   2   1   1   1   5   4   2
    1314   3   1   3   1   0   0   1
    1321   1   4   0   1   3   1   1
    1328   2   3   0   5   2   0   1
    1335   0   2   0   1   6   1   1
PERCENT ARSENIC   .0009
    % RSD COUNTING   53.5
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1314   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   31DEC79 0958:42

91119065 RF   PB   Q368C'

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 1617:26	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	600 SEC	VOLUME	UG	9653.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                            OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

996	2	1	4	2	2	2	2
1003	4	2	1	2	3	3	1
1010	3	3	1	3	1	4	1
1017	5	3	4	7	10	12	19
1024	12	8	7	12	7	1	4
1031	1	2	0	1	2	2	1
1038	3	4	1	2	1	3	4
1045	1	2	2	3	2	0	3

PERCENT COPPER   .0039

% RSD COUNTING   14.9

1102	3	2	2	0	2	2	2
1109	3	3	1	2	4	1	3
1116	4	1	1	1	1	2	4
1123	2	3	2	2	6	7	16
1130	7	7	5	4	2	0	5
1137	0	0	0	0	2	1	4
1144	0	4	4	1	1	2	3
1151	2	3	2	1	2	0	2

PERCENT ANTIMONY   .0003

% RSD COUNTING   19.0

1284	2	3	2	1	1	2	2
1291	1	2	1	4	1	2	1
1298	3	2	0	3	0	1	1
1305	1	0	2	0	2	2	2
1312	1	2	2	4	0	0	0
1319	1	0	0	0	2	1	1
1326	1	5	0	3	0	2	1
1333	2	1	3	2	1	1	1

PERCENT ARSENIC   .0009

% RSD COUNTING   48.2

CENTROID CHANNEL	COPPER	1024	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1130		SB-122	4043 MIN.
	ARSENIC	1312		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43	COPPER	25	
	ARSENIC	41.10	ANTIMONY	25	

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1 31DEC79 1000:35

91119065 RF   PB   Q355A

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1627:39   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   616 SEC   VOLUME   UG   9500.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

    995   124   106   114   99   126   126   104
   1002   135   120   105   115   115   135   112
   1009   112   127   115   105   108   117   107
   1016   124   117   125   139   206   218   228
   1023   241   235   217   159   128   125   105
   1030   116   111   116   99   105   104   95
   1037   108   109   100   104   120   107   97
   1044   98   131   110   92   88   110   91
PERCENT COPPER   .0469
   % RSD COUNTING   6.2
   1101   122   101   147   114   121   140   97
   1108   119   125   131   141   126   148   157
   1115   178   332   672   1091   1452   1380   925
   1122   499   336   474   1189   3299   8202   15823
   1129   20916   18835   11827   4726   1295   280   96
   1136   44   44   44   40   38   37   19
   1142   28   32   27   35   31   19   25
   1150   39   22   35   28   36   37   24
PERCENT ANTIMONY   .7400
   % RSD COUNTING   .3
   1287   21   15   14   33   52   66   75
   1294   74   49   25   25   10   18   16
   1301   18   12   19   21   17   17   17
   1308   17   12   18   22   39   67   90
   1315   160   170   112   62   36   26   20
   1322   13   12   15   13   18   10   17
   1329   18   24   19   32   25   22   16
   1336   24   18   17   18   20   22   17
PERCENT ARSENIC   .0623
   % RSD COUNTING   4.8
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75 BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1002:29

91119065 RF   PB   Q355B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME	28DEC79 1638:09	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	615 SEC	VOLUME	UG	7508.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B =	10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25			
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00			

995	98	98	102	94	107	78	107
1002	105	107	107	116	114	104	103
1009	82	92	94	86	76	104	109
1016	105	97	132	137	158	175	220
1023	211	211	153	157	112	98	96
1030	99	85	93	84	81	100	81
1037	99	91	73	91	84	87	101
1044	91	97	96	99	99	90	105

PERCENT COPPER   .0479
   % RSD COUNTING   7.2

1101	86	109	105	104	105	96	107
1108	113	97	114	119	105	119	136
1115	182	290	586	945	1317	1257	751
1122	459	281	465	1024	2883	7492	14187
1129	18886	17353	10871	4354	1149	290	85
1136	33	36	33	42	20	39	38
1143	33	19	31	41	27	33	28
1150	21	24	27	24	31	27	26

PERCENT ANTIMONY   .8533
   % RSD COUNTING   .3

1287	13	19	20	28	38	70	77
1294	69	49	33	26	19	20	16
1301	22	14	10	17	22	23	13
1308	10	15	22	18	34	55	93
1315	150	140	89	63	20	19	20
1322	12	14	13	23	12	8	17
1329	15	18	24	28	17	10	14
1336	9	15	17	14	17	23	16

PERCENT ARSENIC   .0694
   % RSD COUNTING   5.2

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.	
	ANTIMONY	1129	SB-122	4043 MIN.	
	ARSENIC	1315	AS-76	1584 MIN.	
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43	COPPER	25	
	ARSENIC	41.10	ANTIMONY	25	

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1004:22

91119065 RF   PB   Q355C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 1648:37	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	613 SEC	VOLUME	UG 8287.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B = 10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

994	89	94	91	95	84	86	82
1001	109	80	89	98	89	91	75
1008	79	105	86	95	78	95	88
1015	85	103	93	103	110	163	141
1022	205	190	174	151	107	106	91
1029	74	83	83	79	85	92	92
1036	79	82	67	80	99	84	76
1043	84	79	78	80	81	85	91

PERCENT COPPER   .0381

% RSD COUNTING   7.8

1101	93	100	95	99	84	89	99
1108	88	110	84	111	103	113	104
1115	173	248	525	839	1142	1099	707
1122	400	255	362	840	2504	6429	12346
1129	16494	15264	9440	3924	1118	219	68
1136	32	27	32	21	26	24	23
1143	22	29	20	18	28	16	26
1150	16	24	23	23	20	25	25

PERCENT ANTIMONY   .6763

% RSD COUNTING   .3

1287	10	22	17	25	37	47	63
1294	68	59	20	19	14	11	13
1301	8	17	18	9	12	9	10
1308	18	16	18	17	36	58	90
1315	122	135	96	50	28	17	11
1322	16	7	9	7	9	13	11
1329	11	10	12	19	24	13	15
1336	11	18	14	20	22	11	19

PERCENT ARSENIC   .0631

% RSD COUNTING   4.9

CENTROID CHANNEL	COPPER	1022	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1315		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43		COPPER	25
	ARSENIC	41.10		ANTIMONY	25
CONSTANTS:				ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10		
LN2=.69315					

EXPERIMENT 1   31DEC79 1006:16

91119065 RF   PB   Q356A

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 1659:03	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	622 SEC	VOLUME	UG 10442.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	157	162	173	148	155	167	186
1002	165	151	156	157	142	136	144
1009	147	152	127	135	152	143	164
1016	158	139	162	194	252	314	337
1023	341	284	261	236	200	172	153
1030	155	136	126	143	138	128	132
1037	126	124	138	143	121	147	128
1044	128	127	155	129	139	151	138

PERCENT COPPER   .0557
   % RSD COUNTING   5.7

1101	165	158	157	156	143	183	161
1108	168	154	178	160	205	183	192
1115	280	443	795	1391	1827	1627	1161
1122	640	543	705	1728	4769	11776	21953
1129	28924	25853	15691	6413	1795	381	141
1136	91	75	66	59	55	56	57
1143	50	56	44	48	35	53	47
1150	38	40	41	42	42	37	34

PERCENT ANTIMONY   .9345
   % RSD COUNTING   .2

1288	16	29	41	62	81	119	111
1295	64	40	23	29	25	30	25
1302	34	21	27	31	19	21	21
1309	24	21	26	38	88	151	190
1316	166	145	94	43	26	15	22
1323	32	20	24	18	21	27	24
1330	22	30	38	36	25	35	29
1337	24	30	30	22	34	30	17

PERCENT ARSENIC   .0700
   % RSD COUNTING   4.4

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1008:10

91119065 RF   PB   Q356B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1709:39   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   620 SEC   VOLUME   UG   8982.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

   995   138   147   131   150   176   114   126
  1002   134   116   141   150   145   137   136
  1009   139   148   146   152   148   135   157
  1016   138   152   162   180   206   260   276
  1023   284   279   231   212   171   163   126
  1030   124   129   130   124   109   122   133
  1037   118   113   134   133   122   127   143
  1044   123   142   130   122   123   129   121
PERCENT COPPER   .0548
   % RSD COUNTING   6.4
  1101   137   148   145   141   132   147   131
  1108   150   153   152   162   150   167   170
  1115   221   391   745   1223   1620   1516   1022
  1122   587   421   597   1509   4375   10370   19208
  1129   25607   22896   14093   5750   1658   356   79
  1136   66   54   59   55   43   54   36
  1143   43   42   41   41   30   31   37
  1150   39   32   30   25   33   34   31
PERCENT ANTIMONY   .9650
   % RSD COUNTING   .3
  1288   23   21   35   62   78   84   101
  1295   73   47   25   29   22   17   20
  1302   23   22   29   17   19   15   28
  1309   19   20   27   35   54   156   165
  1316   168   116   79   49   29   17   14
  1323   21   22   24   17   17   20   20
  1330   22   32   27   17   22   16   13
  1337   15   22   27   20   17   17   18
PERCENT ARSENIC   .0732
   % RSD COUNTING   4.7
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC     ●               ●

EXPERIMENT 1  31DEC79 1010:04

91119065 RF           PB                    Q356C

SAMPLE TIME         26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME    28DEC79 1720:12   TYPE       COR 5M
PRESET TIME     600 SEC               GEOMETRY   SHELF 1      0.250
ELAPSED TIME    620 SEC               VOLUME     UG        9625.000
LIVE TIME       600 SEC               DETECTOR   GELI 15

CALIBRATION DATE    28DEC79 0952:04    KEV/CH        0.500
                                       OFFSET        0.546

                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2.000        SLOPE        0.500 E-3
SENSITIVITY     16   B =   10.000        OFFSET       4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

    995      137      154      128      154      153      142      137
   1002      151      136      132      162      136      136      132
   1009      145      149      138      138      138      133      133
   1016      145      139      166      167      197      249      267
   1023      308      268      240      193      141      136      163
   1030      127      124      139      114      137      134      140
   1037      135      147      115      110      119      129      132
   1044      140      146      134      119      131      144      116
PERCENT  COPPER                        .0485
   % RSD COUNTING        6.8
   1101      143      130      158      148      148      179      164
   1108      150      132      166      169      162      191      179
   1115      248      342      783     1232     1504     1538     1046
   1122      628      447      662     1540     4266    10738    19577
   1129    25935    23125    14191     5865     1614      356      103
   1136       59       54       55       42       57       35       41
   1143       43       47       35       36       35       38       40
   1150       41       31       33       29       29       28       31
PERCENT  ANTIMONY                      .9143
   % RSD COUNTING         .3
   1287       26       29       23       29       67       70      108
   1294       73       65       38       24       31       28       25
   1301       24       16       21       16       22       21       17
   1308       19       27       17       24       38       77      126
   1315      180      185      127       67       33       23       21
   1322       17       21       25       15       20       15       20
   1329       23       30       32       20       24       21       22
   1336       27       15       27       26       25       18       24
PERCENT  ARSENIC                       .0711
   % RSD COUNTING        4.5
CENTROID CHANNEL COPPER       1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1129             SB-122   4043 MIN.
                 ARSENIC      1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43      COPPER    25
                 ARSENIC     41.10      ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1011:58

91119065 RF   PB   Q357A

SAMPLE TIME		26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME		28DEC79 1730:45	TYPE	COR 5M
PRESET TIME	600 SEC		GEOMETRY	SHELF 1 0.250
ELAPSED TIME	610 SEC		VOLUME	UG 8168.000
LIVE TIME	600 SEC		DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	81	70	64	67	72	82	76
1002	77	86	78	64	68	60	82
1009	84	60	66	63	68	69	79
1016	67	68	75	85	128	135	146
1023	180	169	125	113	92	75	74
1030	72	76	79	63	65	80	67
1037	64	53	71	66	61	74	72
1044	60	64	74	68	78	63	71

PERCENT COPPER   .0380
% RSD COUNTING   7.7

1101	83	79	68	69	81	84	74
1108	73	73	93	88	87	91	108
1115	90	145	174	249	302	283	244
1122	160	191	292	808	2130	5390	10563
1129	14507	13305	8068	3369	980	211	52
1136	25	25	20	21	16	14	16
1143	23	24	23	13	16	19	17
1150	9	14	9	16	13	13	11

PERCENT ANTIMONY   .5971
% RSD COUNTING   .4

1288	10	22	15	30	31	58	57
1295	35	17	15	17	11	9	17
1302	14	13	14	12	11	18	9
1309	11	12	12	8	13	15	33
1316	32	29	18	12	16	10	8
1323	5	11	8	7	11	5	10
1330	9	13	9	13	11	7	10
1337	11	8	10	21	12	12	7

PERCENT ARSENIC   .0098
% RSD COUNTING   19.3

CENTROID CHANNEL	COPPER	1023	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1316		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43		COPPER	25
	ARSENIC	41.10		ANTIMONY	25

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   31DEC79 1013:52

91119065 RF   PB   Q357B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME	28DEC79 1741:09	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	611 SEC	VOLUME	UG	8321.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

995	89	82	72	80	81	74	86
1002	79	85	79	67	82	73	71
1009	70	68	87	73	81	82	71
1016	88	75	92	92	126	111	168
1023	178	172	148	116	114	71	85
1030	92	65	65	77	72	66	88
1037	78	64	67	77	78	65	81
1044	69	64	76	67	63	63	72

PERCENT COPPER   .0382
   % RSD COUNTING   7.6

1101	80	88	79	90	75	78	78
1108	84	87	83	74	86	102	90
1115	99	116	179	271	302	319	254
1122	177	187	310	811	2284	5580	10835
1129	14574	13268	8164	3345	939	191	37
1136	26	22	23	18	24	20	16
1143	24	21	17	18	22	22	15
1150	20	18	15	27	17	9	13

PERCENT ANTIMONY   .5943
   % RSD COUNTING   .4

1288	11	16	20	27	51	57	48
1295	27	19	16	13	14	12	17
1302	15	10	8	6	14	10	9
1309	7	6	17	8	20	29	23
1316	31	29	15	11	12	6	11
1323	7	7	16	9	6	12	10
1330	14	18	16	10	14	8	6
1337	13	10	24	9	11	6	7

PERCENT ARSENIC   .0112
   % RSD COUNTING   16.6

CENTROID CHANNEL COPPER	1023	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1129	SB-122	4043 MIN.
ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	318.75	BACKGROUND SPACING:	
ANTIMONY	206.43	COPPER	25
ARSENIC	41.10	ANTIMONY	25

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1015:46

91119065 RF   PB   Q357C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 1751:33	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	611 SEC	VOLUME UG	9565.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B = 10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	82	79	62	102	79	100	93
1002	82	79	74	80	76	80	82
1009	60	73	71	63	72	88	75
1016	71	90	87	92	128	142	197
1023	195	176	162	133	105	103	83
1030	69	69	71	75	84	78	64
1037	85	85	79	76	84	73	85
1044	79	80	85	85	92	86	70

PERCENT COPPER   .0360
   % RSD COUNTING   7.6

1101	87	98	92	95	83	98	91
1108	82	72	99	101	105	91	101
1115	116	140	186	303	292	308	240
1122	183	223	338	812	2495	6216	11865
1129	15909	14234	8877	3585	945	201	47
1136	25	17	20	27	25	15	21
1143	17	33	14	10	18	27	16
1150	20	21	10	16	19	13	19

PERCENT ANTIMONY   .5636
   % RSD COUNTING   .4

1287	13	6	17	25	22	63	53
1294	53	41	18	16	13	14	11
1301	18	12	8	9	16	8	14
1308	11	11	12	14	11	21	20
1315	44	31	23	24	11	8	13
1322	13	8	9	6	12	9	11
1329	6	6	16	9	11	16	16
1336	12	14	14	10	17	11	10

PERCENT ARSENIC   .0114
   % RSD COUNTING   14.8

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1017:39

91119065 RF           PB                    Q401A

SAMPLE TIME           26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME      28DEC79 1801:58   TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1        0.250
ELAPSED TIME     612 SEC                VOLUME     UG          9290.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE      28DEC79 0952:04   KEV/CH          0.500
                                        OFFSET          0.546

                      NORMALIZATION CONSTANTS   GAMMA
FWHM                5    A =     2.000         SLOPE        0.500 E-3
SENSITIVITY        16    B =    10.000         OFFSET       4.500
LIBRARY NUMBER      1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO     8    ABUNDANCE LIMIT (%)  80.00

    995       87       88       76       96       68       89       82
   1002       91       77       83       74       78       98       90
   1009       79       85       82       87       75       88       86
   1016      107       99      111      126      183      192      190
   1023      253      246      194      148      102       92       89
   1030       93       80       78       74       91       68       75
   1037       75       78       89       90       76       86       65
   1044       71       91       80       66       87       84       82
PERCENT COPPER                            .0574
   % RSD COUNTING        5.3
   1101       88       86       94       89       82       94       88
   1108       94       92       95      105       84      109       81
   1115      103      118      103      133      142      120      147
   1122      137      234      370      897     2606     6610    12652
   1129    16770    15213     9058     3603      993      198       46
   1136       39       28       29       25       31       16       25
   1143       26       24       16       24       23       26       13
   1150       24       28       13       22       21       15       16
PERCENT ANTIMONY                          .6122
   % RSD COUNTING         .3
   1285       11        6       13       15       10       19       37
   1292       61       57       50       43       17       13       17
   1299       10       13       11        9       10       10       10
   1306       13       11       11        8       13       10        9
   1313        8       12        8       13       10       11        7
   1320       17       14        7       23        9       10        9
   1327       13       11        9       11        7       10        8
   1334       10       16       20       12       12       14       15
PERCENT ARSENIC                          -.0006
   % RSD COUNTING     -202.1
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129             SB-122  4043 MIN.
                 ARSENIC     1313             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER    318.75   BACKGROUND SPACING:
                 ANTIMONY  206.43      COPPER    25
                 ARSENIC    41.10      ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1019:33

91119065 RF             PB                      Q401B

SAMPLE TIME             26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME        28DEC79 1812:23   TYPE       COR 5M
PRESET TIME      600 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME     611 SEC                  VOLUME     UG        8823.000
LIVE TIME        600 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        28DEC79 0952:04   KEV/CH        0.500
                                          OFFSET        0.546

                       NORMALIZATION CONSTANTS   GAMMA
FWHM              5   A =      2.000       SLOPE       0.500 E-3
SENSITIVITY     16   B =     10.000       OFFSET      4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

   995        85        74        80        75        83        77        94
  1002        67        81       105        86        66        88        82
  1009        86        82        86        70        75        73        58
  1016        71        94       119       117       171       198       245
  1023       234       217       178       147       103       101        87
  1030        76        84        77        68        72        73        75
  1037        57        74        60        77        68        74        63
  1044        83        64        85        81        63        84        72
PERCENT  COPPER                        .0620
   % RSD COUNTING         5.1
  1101        77        89        84        86        84        76        72
  1108        72        80        88        94        75        89        83
  1115       111        84       101       109       107       118       128
  1122       154       196       329       838      2516      6328     11929
  1129     15704     14387      8758      3494       958       177        74
  1136        28        18        25        27        19        18        25
  1143        28        17        25        15        31        17        18
  1150        16        13        19        16        28        21        17
PERCENT  ANTIMONY                      .6128
   % RSD COUNTING          .4
  1285        14        11         8        21        11        20        33
  1292        48        63        48        33        22        12         8
  1299         6         7         8         5        12         8        11
  1306        16         6        11         9        17        10        10
  1313         9         9        11        10         8         8        11
  1320        17        10        13         8         9        11        16
  1327        16        11        12         9        10        12         6
  1334        11        10        21        14        14        19        11
PERCENT  ARSENIC                       .0011
   % RSD COUNTING       125.6
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129             SB-122   4043 MIN.
                 ARSENIC       1313             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER       318.75  BACKGROUND SPACING:
                 ANTIMONY     206.43     COPPER    25
                 ARSENIC       41.10     ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1021:27

91119065 RF   PB   0401C

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1822:48   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   611 SEC   VOLUME   UG   9156.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                          OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   995   86   95   84   88   73   78   85
  1002   80   88   86   93   67   83   83
  1009   85   84   75   85   76   85   56
  1016   82   99   112   140   160   189   241
  1023   218   231   188   143   115   89   75
  1030   64   74   67   72   69   82   67
  1037   68   67   61   64   76   75   76
  1044   91   77   69   74   105   74   78
PERCENT COPPER   .0566
   % RSD COUNTING   5.5
  1101   93   74   90   87   67   88   84
  1108   82   101   87   105   98   84   94
  1115   98   111   97   123   117   103   140
  1122   137   199   381   906   2528   6521   12283
  1129   16005   14219   8780   3363   931   196   45
  1136   28   32   24   22   21   25   27
  1143   29   25   20   18   21   17   19
  1150   17   19   21   15   20   18   11
PERCENT ANTIMONY   .5972
   % RSD COUNTING   .3
  1284   12   8   12   13   10   12   19
  1291   31   53   59   63   46   27   18
  1298   17   16   15   14   12   10   14
  1305   10   9   11   9   13   13   13
  1312   7   11   11   8   12   10   11
  1319   12   9   10   9   12   15   11
  1326   4   14   9   9   6   13   11
  1333   10   8   10   10   18   7   25
PERCENT ARSENIC   -.0009
   % RSD COUNTING   -158.1
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1312   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1023:21

91119065 RF   PB   Q402A

SAMPLE TIME		26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME		28DEC79 1833:13	TYPE	COR 5M	
PRESET TIME	600 SEC		GEOMETRY	SHELF 1	0.250
ELAPSED TIME	612 SEC		VOLUME	UG	9512.000
LIVE TIME	600 SEC		DETECTOR	GELI 15	

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	91	83	89	94	89	78	80
1002	96	72	88	78	87	81	86
1009	92	73	76	92	82	79	85
1016	96	84	124	137	186	202	230
1023	257	247	198	165	113	78	78
1030	102	88	90	64	73	77	63
1037	94	77	78	78	75	51	65
1044	81	84	59	50	69	72	60

PERCENT COPPER   .0666
    % RSD COUNTING   4.6

1101	89	78	84	74	78	87	98
1108	78	91	76	89	86	98	84
1115	91	108	100	91	114	112	134
1122	157	229	379	966	2747	6817	12663
1129	16597	14872	8940	3631	990	215	47
1136	30	24	22	27	23	25	28
1143	20	23	22	14	19	21	17
1150	16	20	22	13	19	17	21

PERCENT ANTIMONY   .5993
    % RSD COUNTING   .3

1287	12	13	12	21	40	43	71
1294	47	32	24	15	7	13	17
1301	18	10	14	9	9	13	13
1308	13	10	10	6	11	13	10
1315	20	14	11	13	10	11	11
1322	5	11	13	10	14	9	9
1329	10	15	4	9	10	14	10
1336	8	10	12	13	10	14	9

PERCENT ARSENIC   .0012
    % RSD COUNTING   114.2

CENTROID CHANNEL	COPPER	1023	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1315		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43	COPPER	25	
	ARSENIC	41.10	ANTIMONY	25	

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1025:15

91119065 RF   PB   Q402B

```
SAMPLE TIME          26DEC79 1027:00   LOCATION    AFFRI
ACQUISITION TIME     28DEC79 1843:38   TYPE        COR 5M
PRESET TIME      600 SEC               GEOMETRY    SHELF 1      0.250
ELAPSED TIME     611 SEC               VOLUME      UG        8811.000
LIVE TIME        600 SEC               DETECTOR    GELI 15

CALIBRATION DATE     28DEC79 0952:04   KEV/CH          0.500
                                       OFFSET          0.546
```

NORMALIZATION CONSTANTS   GAMMA

```
FWHM              5   A =    2.000       SLOPE        0.500 E-3
SENSITIVITY      16   B =   10.000       OFFSET       4.500
LIBRARY NUMBER    1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)  80.00
```

```
 994     64      87      70      94      79      77      88
1001     66     100      85      92      81      90      67
1008     89      85      69     108      85      81      82
1015     90      84      89      97     142     166     200
1022    233     234     207     180     114     112      95
1029    102      67      62      56      76      52      85
1036     71      68      81      82      85      76      70
1043     75      57      75      70      73      76      78
```

PERCENT COPPER   .0614
% RSD COUNTING   5.3

```
1101     73      73      99      84      76      83      93
1108    100      91      94      99      80      88      95
1115    104      98     103     107     109     118     116
1122    155     210     332     876    2615    6574   12120
1129  15670   13953    8371    3395     824     189      42
1136     35      15      20      23      21      18      26
1143     23      13      25      20      11      14      23
1150     20      27      25      14      18      17      14
```

PERCENT ANTIMONY   .6129
% RSD COUNTING   .4

```
1285     12      10      11       9      11      21      41
1292     48      73      66      34      20      19      17
1299     13      12      13      11      15      10       7
1306     11      12      14       6      13      14      10
1313      8      16       9       9      10      12      12
1320     13       9      11       8      12       9      19
1327     10       4       9      13      16       9       5
1334     11       9      12      14      16      15      14
```

PERCENT ARSENIC   .0006
% RSD COUNTING   224.5

```
CENTROID CHANNEL COPPER      1022    HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129              SB-122  4043 MIN.
                 ARSENIC     1313              AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER    318.75    BACKGROUND SPACING:
                 ANTIMONY  206.43       COPPER    25
                 ARSENIC    41.10       ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1027:09

91119065 RF   PB   0402C

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1854:03   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   610 SEC   VOLUME   UG   8057.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

    995   68   83   76   86   77   95   93
   1002   69   62   64   76   74   74   68
   1009   72   68   78   64   53   55   65
   1016   66   78   93   112   134   172   183
   1023   204   175   164   138   104   71   75
   1030   49   85   68   68   61   69   73
   1037   54   60   67   52   81   75   76
   1044   67   59   65   72   60   70   60
PERCENT COPPER   .0539
   % RSD COUNTING   6.3
   1101   81   82   76   71   95   70   72
   1108   82   98   81   60   102   87   70
   1115   96   81   73   97   99   107   99
   1122   127   185   299   856   2299   5912   11047
   1129   14468   12904   7760   3063   813   160   33
   1136   21   26   22   23   29   17   14
   1143   21   19   26   16   16   21   17
   1150   15   13   19   19   10   15   23
PERCENT ANTIMONY   .6152
   % RSD COUNTING   .4
   1284   10   9   10   15   11   21   16
   1291   26   51   52   45   32   20   8
   1298   12   10   11   10   13   11   13
   1305   15   13   8   7   14   9   12
   1312   12   11   8   4   8   10   10
   1319   7   6   12   9   5   8   7
   1326   10   6   13   16   8   6   13
   1333   15   13   11   11   10   13   17
PERCENT ARSENIC   .0001
   % RSD COUNTING   840.9
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1312   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1029:03

91119065 RF              PB                    Q403A

SAMPLE TIME          26DEC79 1027:00   LOCATION    AFFRI
ACQUISITION TIME     28DEC79 1904:27   TYPE        COR 5M
PRESET TIME      600 SEC               GEOMETRY    SHELF 1       0.250
ELAPSED TIME     614 SEC               VOLUME      UG      10385.000
LIVE TIME        600 SEC               DETECTOR    GELI 15

CALIBRATION DATE     28DEC79 0952:04   KEV/CH          0.500
                                       OFFSET          0.546

                    NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =     2.000          SLOPE        0.500 E-3
SENSITIVITY       16    B =    10.000          OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

   995     100      88     100     109     100     118     105
  1002      97      87     101      95      93     101      92
  1009      94     106      99      91     111      87     106
  1016      98     126     128     144     180     249     274
  1023     278     292     216     177     141      98     107
  1030     102      93     102      97     106      94      96
  1037      86      86      96      86      68     108      83
  1044      83      95      93      94      93      93      89
PERCENT COPPER                          .0639
   % RSD COUNTING       4.9
  1101     106     113     125      94      97     118     114
  1108     108     134     104     105     110     117     121
  1115     130     104     123     126     152     137     146
  1122     186     283     469    1111    3303    8084   15216
  1129   19971   17290   10533    4043    1087     215      70
  1136      50      39      27      37      36      35      20
  1143      27      34      27      20      24      11      18
  1150      33      27      26      18      23      25      20
PERCENT ANTIMONY                        .6527
   % RSD COUNTING       .3
  1287      10      18      23      33      32      65      69
  1294      74      49      22      20      21      16      18
  1301      18      13      15      11       9      22      14
  1308      15       3       7      15      14      13      15
  1315      13      12      14      17      11      11      15
  1322       8       9      15      21      13      13      14
  1329      15      10      14      15      16      25      26
  1336       8      15      24      22      19      16      14
PERCENT ARSENIC                        -.0001
   % RSD COUNTING    -1003.5
CENTROID CHANNEL COPPER       1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1129             SB-122   4043 MIN.
                 ARSENIC      1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43       COPPER    25
                 ARSENIC     41.10       ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1030:57

91119065 RF   PB   0403B

```
SAMPLE TIME          26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME     28DEC79 1914:55   TYPE       COR 5M
PRESET TIME      600 SEC               GEOMETRY   SHELF 1      0.250
ELAPSED TIME     612 SEC               VOLUME     UG        8735.000
LIVE TIME        600 SEC               DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04   KEV/CH        0.500
                                       OFFSET        0.546
```

```
                    NORMALIZATION CONSTANTS   GAMMA
FWHM               5   A =    2.000          SLOPE      0.500 E-3
SENSITIVITY       16   B =   10.000          OFFSET     4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE    1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%)  80.00
```

```
  995      59      81     103      94      90      75      85
 1002      84      84      82      92      91      77      84
 1009      92     102     107      78      88      96     113
 1016      97      91      96     119     157     219     244
 1023     230     239     188     156     106     100      96
 1030      85      85      89      65      69      76      92
 1037      78      77      87      86      89      81      71
 1044      84      68      78      73      75      66      84
```

PERCENT COPPER   .0671
```
    % RSD COUNTING        5.2
 1101      85      89      75      83     110      90      97
 1108      90     104      85      88     109      84     100
 1115     103     106      94     126     105     112     130
 1122     143     237     390     959    2771    6995   13083
 1129   17257   15288    9129    3624     983     199      57
 1136      35      42      27      24      15      22      18
 1143      10      10      21      12      22      15      16
 1150      15      18      12      21      24      16      18
```

PERCENT ANTIMONY   .6756
```
    % RSD COUNTING         .3
 1285      14      17      17       9      12      20      40
 1292      46      72      45      39      20      20      10
 1299      15      12       9      17      16      10      11
 1306       9      10      16      11      17       9      11
 1313      14      14      18      11       7       8      18
 1320      13       5      11      10      11      18      17
 1327      10       8      12      13       9      10       9
 1334       8      14      15      12      19      19      13
```

PERCENT ARSENIC   .0014
```
    % RSD COUNTING      116.5
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129             SB-122   4043 MIN.
                 ARSENIC       1313             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      318.75   BACKGROUND SPACING:
                 ANTIMONY    206.43      COPPER    25
                 ARSENIC      41.10      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

EXPERIMENT 1   31DEC79 1032:50

91119065 RF   PB   Q403C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI		
ACQUISITION TIME	28DEC79 1925:21	TYPE	COR 5M		
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250	
ELAPSED TIME	612 SEC	VOLUME	UG	8737.000	
LIVE TIME	600 SEC	DETECTOR	GELI 15		

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

995	76	91	71	75	75	97	88
1002	78	86	86	74	92	93	85
1009	91	93	84	70	82	86	80
1016	89	98	104	119	159	212	209
1023	281	208	151	155	110	90	107
1030	82	77	79	78	78	71	85
1037	87	76	75	71	82	51	73
1044	74	90	62	89	55	77	90

PERCENT COPPER   .0652
    % RSD COUNTING   5.2

1101	65	93	104	86	97	86	79
1108	107	93	98	88	111	98	97
1115	95	97	83	110	120	118	153
1122	137	193	371	950	2641	6853	12803
1129	16850	14872	8772	3579	943	172	44
1136	28	27	26	30	15	21	21
1143	18	15	19	26	22	19	22
1150	19	22	18	24	18	19	18

PERCENT ANTIMONY   .6588
    % RSD COUNTING   .3

1285	11	9	9	13	15	18	39
1292	62	53	54	45	22	20	13
1299	15	9	16	9	8	12	12
1306	12	10	14	13	14	10	12
1313	10	7	13	14	12	6	9
1320	11	7	13	15	11	10	12
1327	11	17	6	12	7	11	8
1334	13	12	16	13	12	8	11

PERCENT ARSENIC   .0001
    % RSD COUNTING   1401.4

CENTROID CHANNEL COPPER	1023		HALF-LIFE CU-64	768 MIN.		
ANTIMONY	1129		SB-122	4043 MIN.		
ARSENIC	1313		AS-76	1584 MIN.		
COUNTS/MICROGRAM COPPER	318.75		BACKGROUND SPACING:			
ANTIMONY	206.43		COPPER	25		
ARSENIC	41.10		ANTIMONY	25		

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1034:44

91119065 RF   FB   Q404A

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1935:46   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   618 SEC   VOLUME   UG   11042.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

   995   135   131   130   144   118   128   102
  1002   127   121   136   121   121   97   105
  1009   127   134   103   122   119   124   147
  1016   129   137   174   204   295   319   411
  1023   358   369   303   215   168   158   122
  1030   127   131   106   98   137   114   136
  1037   126   124   97   100   133   96   129
  1044   114   128   125   110   102   114   125
PERCENT COPPER   . 0888
   % RSD COUNTING   3.9
  1101   122   114   128   119   121   140   152
  1108   124   160   128   163   131   139   152
  1115   154   218   261   399   422   443   354
  1122   283   358   590   1539   4418 10559 19148
  1129 24799 21139 12271   4770   1195   261   89
  1136   60   52   41   39   31   36   38
  1143   33   38   32   38   31   29   30
  1150   32   23   31   33   26   26   23
PERCENT ANTIMONY   . 7644
   % RSD COUNTING   .3
  1288   14   21   34   69   72   81   79
  1295   51   32   24   25   12   21   26
  1302   19   16   21   21   13   22   23
  1309   14   15   17   23   24   56   46
  1316   43   41   21   31   18   23   19
  1323   15   18   22   16   11   17   16
  1330   25   15   17   25   22   11   19
  1337   21   22   24   25   14   9   13
PERCENT ARSENIC   . 0131
   % RSD COUNTING   14.8
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1036:38

91119065 RF   PB   Q404B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 1946:17   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   615 SEC   VOLUME   UG   8970.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    994   105   108   97   104   117   101   82
   1001   95   83   136   94   116   87   112
   1008   113   109   106   110   103   86   92
   1015   103   87   98   124   202   219   277
   1022   314   319   269   261   193   169   122
   1029   118   128   83   107   85   101   102
   1036   93   95   93   92   82   92   93
   1043   79   98   90   99   84   104   93
PERCENT COPPER   .0910
    % RSD COUNTING   4.3
   1101   99   102   96   101   101   104   115
   1108   122   100   82   109   126   122   131
   1115   144   176   238   298   409   375   307
   1122   238   293   524   1273   3471   8788   15867
   1129   20672   18072   10465   4115   1094   229   66
   1136   47   40   32   34   21   25   20
   1143   29   33   25   23   33   24   32
   1150   31   28   24   20   29   25   18
PERCENT ANTIMONY   .7909
    % RSD COUNTING   .3
   1288   14   22   23   43   66   77   69
   1295   44   21   21   17   14   15   13
   1302   13   14   13   19   10   16   13
   1309   11   18   14   14   29   37   40
   1316   42   38   20   20   13   15   16
   1323   13   18   14   15   12   8   13
   1330   19   8   14   16   18   15   8
   1337   19   10   20   21   19   16   16
PERCENT ARSENIC   .0158
    % RSD COUNTING   13.8
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75 BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1 31DEC79 1038:32

91119065 RF   PB   Q404C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 1956:45	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	616 SEC	VOLUME	UG 9769.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	111	114	110	125	115	95	100
1002	122	100	109	97	103	99	119
1009	107	120	102	123	97	106	115
1016	125	130	111	166	238	278	318
1023	325	320	257	184	163	129	118
1030	106	105	90	122	108	101	118
1037	102	97	96	84	86	104	107
1044	96	109	97	111	96	92	90

PERCENT COPPER   .0862
  % RSD COUNTING   4.3

1101	119	107	113	119	109	133	109
1108	129	118	102	121	127	123	111
1115	140	184	234	314	350	341	300
1122	258	315	511	1363	3736	9057	16564
1129	21514	18328	10821	4162	1173	236	67
1136	48	45	42	40	38	28	26
1143	44	25	29	32	31	30	24
1150	26	26	24	18	22	20	21

PERCENT ANTIMONY   .7515
  % RSD COUNTING   .3

1287	16	18	16	32	40	85	93
1294	68	51	29	21	14	13	18
1301	16	10	12	19	16	10	10
1308	14	18	15	15	20	27	36
1315	46	46	29	20	16	14	19
1322	13	14	18	17	14	17	18
1329	17	8	18	20	10	15	13
1336	16	22	18	24	26	15	16

PERCENT ARSENIC   .0136
  % RSD COUNTING   14.9

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS	10
LN2=.69315				

EXPERIMENT 1   31DEC79 1040:26

91119065 RF   PB   Q405A

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME	28DEC79 2007:14	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	611 SEC	VOLUME	UG	8386.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B = 10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

994	79	83	90	90	83	81	95
1001	71	79	86	86	77	68	68
1008	81	64	66	85	80	64	87
1015	79	88	95	113	141	182	222
1022	231	210	210	183	141	102	101
1029	88	77	85	71	52	76	75
1036	85	61	73	90	81	83	79
1043	91	56	64	89	82	68	74

PERCENT COPPER   .0696
   % RSD COUNTING   5.3

1101	98	82	77	84	91	96	78
1108	88	86	103	90	74	93	89
1115	98	121	133	193	204	206	183
1122	180	231	380	833	2571	6488	12208
1129	15836	14185	8166	3305	864	156	45
1136	21	31	26	25	20	24	22
1143	17	21	21	25	16	10	24
1150	20	17	16	14	11	14	23

PERCENT ANTIMONY   .6539
   % RSD COUNTING   .4

1287	16	14	17	24	50	53	55
1294	61	40	22	15	12	6	8
1301	11	11	12	15	5	7	15
1308	9	8	8	6	15	21	17
1315	29	28	26	16	13	17	8
1322	4	13	12	6	18	11	9
1329	11	8	11	12	12	12	12
1336	12	11	13	13	11	11	12

PERCENT ARSENIC   .0095
   % RSD COUNTING   21.0

CENTROID CHANNEL	COPPER	1022	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

EXPERIMENT 1   31DEC79 1042:20

91119065 RF   PB   Q405B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME	28DEC79 2017:39	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	613 SEC	VOLUME	UG	9326.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B =	10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25			
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00			

995	87	95	67	78	99	84	82
1002	83	104	94	91	87	102	99
1009	90	84	73	98	84	94	103
1016	99	89	123	142	169	226	267
1023	268	257	210	149	122	92	95
1030	95	88	80	93	88	81	81
1037	88	72	85	79	88	75	79
1044	70	73	84	81	83	73	74

PERCENT COPPER   .0753
    % RSD COUNTING   4.7

1101	90	92	100	79	80	108	104
1108	96	109	80	105	107	96	107
1115	140	151	166	218	252	243	245
1122	163	235	428	1089	2993	7185	13486
1129	17288	15212	9165	3529	910	191	47
1136	31	24	23	31	18	19	29
1143	17	21	23	18	21	20	20
1150	22	16	20	20	24	14	20

PERCENT ANTIMONY   .6463
    % RSD COUNTING   .3

1286	13	17	14	18	21	39	51
1293	65	60	37	24	18	12	19
1300	12	6	12	10	12	8	16
1307	17	10	13	3	20	17	22
1314	24	23	23	22	16	10	19
1321	27	10	15	7	7	12	10
1328	13	9	8	11	10	14	11
1335	10	13	11	16	11	17	12

PERCENT ARSENIC   .0089
    % RSD COUNTING   20.1

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1314	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS	10
LN2=.69315				

FBI LAB WASHINGTON DC

EXPERIMENT 1 31DEC79 1044:14

91119065 RF   PB   Q405C

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 2028:05   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   612 SEC   VOLUME   UG   9070.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                 NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   995   90   68   83   90   84   79   90
  1002   75   95   91   78   80   88   77
  1009   79   97   93   77   94   72   86
  1016   81   97   109   148   161   207   230
  1023   272   226   202   158   104   96   83
  1030   64   82   72   103   75   73   74
  1037   72   83   79   65   83   74   66
  1044   86   65   84   64   64   72   85
PERCENT COPPER   .0735
   % RSD COUNTING   4.8
  1101   82   92   83   85   87   83   87
  1108   92   82   88   86   103   88   105
  1115   102   130   168   210   254   252   189
  1122   205   228   375   976   2786   6890   12828
  1129   16690   14789   8698   3479   842   203   66
  1136   28   26   38   18   26   19   29
  1143   27   19   15   20   23   13   16
  1150   20   11   17   15   19   21   14
PERCENT ANTIMONY   .6398
   % RSD COUNTING   .3
  1288   15   14   20   39   71   70   52
  1295   31   24   11   10   10   13   12
  1302   8   13   15   4   14   8   12
  1309   15   14   6   11   20   16   27
  1316   28   24   15   14   11   12   7
  1323   4   9   13   11   6   11   8
  1330   13   11   10   8   10   6   8
  1337   10   17   14   13   9   18   18
PERCENT ARSENIC   .0068
   % RSD COUNTING   20.4
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1046:08

91119065 RF          PB                    0368A

SAMPLE TIME          26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME     28DEC79 2038:30   TYPE       COR 5M
PRESET TIME      600 SEC               GEOMETRY   SHELF 1      0.250
ELAPSED TIME     608 SEC               VOLUME     UG        7490.000
LIVE TIME        600 SEC               DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04   KEV/CH         0.500
                                       OFFSET         0.546

                     NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =     2.000           SLOPE        0.500 E-3
SENSITIVITY       16    B =    10.000           OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE    1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    994       67      54      72      51      66      58      59
   1001       58      52      71      62      64      71      53
   1008       68      49      64      49      57      66      69
   1015       69      61      62      73      99     117     147
   1022      186     179     162     145      96      80      55
   1029       46      59      64      54      55      63      55
   1036       54      36      47      44      48      56      60
   1043       68      52      50      57      51      50      60
PERCENT COPPER                      .0625
   % RSD COUNTING       5.9
   1101       49      60      71      57      71      52      73
   1108       79      65      73      75      65      96      56
   1115       74      91     102     139     147     139     121
   1122      159     161     244     683    1945    4836    9074
   1129    12008   10448    6325    2396     655     121      38
   1136       27      19      18      23      22      19      14
   1143       12      12      20       7       9      16       7
   1150       11      18       8      17      12      10      11
PERCENT ANTIMONY                    .5517
   % RSD COUNTING        .4
   1287        5      12       7      19      26      31      39
   1294       37      31      17      13       8      10      15
   1301        3      13       8       9       7      10       3
   1308        6       2      11      10      13      11      12
   1315        8      14      10      14       7       8       9
   1322        8       5       8       6      11      11       8
   1329        5       4      12      11       8      10       9
   1336        7      11      10       9      12       9       6
PERCENT ARSENIC                     .0041
   % RSD COUNTING      42.6
CENTROID CHANNEL COPPER        1022   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129             SB-122  4043 MIN.
                 ARSENIC       1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      318.75   BACKGROUND SPACING:
                 ANTIMONY    206.43      COPPER   25
                 ARSENIC      41.10      ANTIMONY 25
CONSTANTS:                              ARSENIC  10
  E=2.7183                           BACKGROUND CHANNELS 10
  LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1048:02

91119065 RF              PB                       Q368B

SAMPLE TIME          26DEC79 1027:00    LOCATION   AFFRI
ACQUISITION TIME     28DEC79 2048:52    TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1        0.250
ELAPSED TIME     610 SEC                VOLUME     UG          8978.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04    KEV/CH          0.500
                                        OFFSET          0.546

                     NORMALIZATION CONSTANTS     GAMMA
FWHM               5    A =    2.000            SLOPE        0.500 E-3
SENSITIVITY       16    B =   10.000            OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE    1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

     995      65       76       62       70       79       73       68
    1002      74       67       62       94       80       68       68
    1009      66       67       59       64       88       72       58
    1016      68       78       85      101      124      191      192
    1023     230      165      165      120       88       86       72
    1030      65       77       54       77       67       63       77
    1037      55       59       62       72       54       54       80
    1044      68       56       60       54       59       71       70
PERCENT COPPER                      .0591
   % RSD COUNTING        5.6
    1101      73       88       87       84       91       77       73
    1108      68       87       67       82       82       75       91
    1115      82       94      125      118      189      193      138
    1122     155      185      332      748     2151     5622    10603
    1129   13691    11927     7129     2875      720      162       33
    1136      19       19       34       16       19       16       22
    1143      20       17       20       20       16       15       10
    1150      13       13       18       15       11       18       19
PERCENT ANTIMONY                    .5288
   % RSD COUNTING        .4
    1288       9       13       23       37       46       68       36
    1295      31       16        9       13       10        7       10
    1302       9        9       10        8       13       13        7
    1309       9        7       14        6       14       10       19
    1316      25       10       15        8        9        8        6
    1323      10        8        6        6        6       16       13
    1330       6       11        7        7        7       17       14
    1337      10       10        9       18       10        9        9
PERCENT ARSENIC                     .0045
   % RSD COUNTING       35.8
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64      768 MIN.
                 ANTIMONY      1129             SB-122    4043 MIN.
                 ARSENIC       1316             AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER      318.75   BACKGROUND SPACING:
                 ANTIMONY    206.43      COPPER     25
                 ARSENIC      41.10      ANTIMONY   25
CONSTANTS:                               ARSENIC    10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1049:56

91119065 RF            PB                    Q368C

SAMPLE TIME           26DEC79 1027:00    LOCATION   AFFRI
ACQUISITION TIME      28DEC79 2059:15    TYPE       COR 5M
PRESET TIME       600 SEC                GEOMETRY   SHELF 1        0.250
ELAPSED TIME      611 SEC                VOLUME     UG          9657.000
LIVE TIME         600 SEC                DETECTOR   GELI 15

CALIBRATION DATE      28DEC79 0952:04    KEV/CH          0.500
                                         OFFSET          0.546

                      NORMALIZATION CONSTANTS     GAMMA
FWHM              5    A =     2.000           SLOPE        0.500 E-3
SENSITIVITY     16    B =    10.000           OFFSET       4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

     995        80       78       82       71       80       79       70
    1002        78       73       87       80       74       85       78
    1009        98       65       77       69       90       90       87
    1016        87       73       84      114      161      192      225
    1023       243      199      171      150      111       94       70
    1030        77       66       74       68       56       61       55
    1037        65       80       75       61       71       75       76
    1044        69       53       78       73       68       85       58
PERCENT  COPPER                    .0632
    % RSD COUNTING        5.3
    1101        88       75       90       88       75       75       90
    1108        89       75      104       92      101       91      106
    1115        86      105      119      154      181      191      176
    1122       146      193      332      837     2404     5977    11410
    1129     14796    13327     7901     3095      848      177       50
    1136        28       23       23       24       12       19       19
    1143        28       18       14       20       15       19       27
    1150        14        8       23       11       14       20       17
PERCENT  ANTIMONY                  .5377
    % RSD COUNTING         .4
    1287         7       10       13       24       32       56       79
    1294        56       34       27       14       15       14        9
    1301        14       15       13        9       14        8        8
    1308        11       15        5       15       10       18       16
    1315        13       25       23       23       10       11        9
    1322         7        5       10        8        6       11        7
    1329         7       14        2        5       12       13       18
    1336         5       17        9       14       18       13       10
PERCENT  ARSENIC                   .0074
    % RSD COUNTING       21.8
CENTROID CHANNEL COPPER         1023   HALF-LIFE CU-64      768 MIN.
                 ANTIMONY       1129             SB-122    4043 MIN.
                 ARSENIC        1315             AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER       318.75   BACKGROUND SPACING:
                 ANTIMONY     206.43      COPPER     25
                 ARSENIC       41.10      ANTIMONY   25
CONSTANTS:                                ARSENIC    10
    E=2.7183                           BACKGROUND CHANNELS 10
    LN2=.69315
```

EXPERIMENT 1   31DEC79 1051:50

91119065 RF   PB   0369A

```
SAMPLE TIME           26DEC79 1027:00   LOCATION    AFFRI
ACQUISITION TIME      28DEC79 2109:39   TYPE        COR 5M
PRESET TIME      600 SEC                GEOMETRY    SHELF 1        0.250
ELAPSED TIME     613 SEC                VOLUME      UG        11556.000
LIVE TIME        600 SEC                DETECTOR    GELI 15

CALIBRATION DATE      28DEC79 0952:04   KEV/CH          0.500
                                        OFFSET          0.546
```

```
                      NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000              SLOPE       0.500 E-3
SENSITIVITY     16    B =   10.000              OFFSET      4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00
```

```
  994      84       84      86      99      99  .    97      69
 1001      79       91      92      88     105      96     114
 1008      92       90     100      87      90      91      77
 1015      89       96     106     117     149     175     214
 1022     260      273     239     198     138     110      89
 1029     112       82      74      87      80      75      72
 1036      64       88      77      70      71      74      75
 1043      67       72      75      78      77      87      84
```
PERCENT   COPPER   .0590
```
   % RSD COUNTING        5.0
 1101      97       93      87      90      91      82      97
 1108      98      109      95     109     107     102     111
 1115     126      125     152     183     224     240     179
 1122     192      227     433     974    2906    7367   13466
 1129   17664    15626    9419    3604     950     198      48
 1136      28       27      19      23      25      32      24
 1143      26       20      23      23      26      19      27
 1150      22       19      29      13      18      23      24
```
PERCENT   ANTIMONY   .5355
```
   % RSD COUNTING         .3
 1288      14       17      28      49      47      58      60
 1295      28       23       8      14      11       9      12
 1302      18       15      16      10       7      14       8
 1309      12       13       6       8      14      12      17
 1316      24       14      12      13      13      12       8
 1323       7       10       8       6      10       9       6
 1330      17        6      11      15       9      12      11
 1337      11       18      16  .   17      13      17      14
```
PERCENT   ARSENIC   .0036
```
   % RSD COUNTING        35.3
CENTROID CHANNEL COPPER        1022   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129             SB-122   4043 MIN.
                 ARSENIC       1316             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      318.75   BACKGROUND SPACING:
                 ANTIMONY    206.43      COPPER     25
                 ARSENIC      41.10      ANTIMONY   25
CONSTANTS:                              ARSENIC    10
  E=2.7183                           BACKGROUND CHANNELS 10
  LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1053:44

91119065 RF              PB                      0369B

SAMPLE TIME             26DEC79 1027:00    LOCATION    AFFRI
ACQUISITION TIME        28DEC79 2120:05    TYPE        COR 5M
PRESET TIME        600 SEC                 GEOMETRY    SHELF 1      0.250
ELAPSED TIME       611 SEC                 VOLUME      UG        10353.000
LIVE TIME          600 SEC                 DETECTOR    GELI 15

CALIBRATION DATE        28DEC79 0952:04    KEV/CH        0.500
                                           OFFSET        0.546

                        NORMALIZATION CONSTANTS    GAMMA
FWHM                5    A =    2.000       SLOPE        0.500 E-3
SENSITIVITY        16    B =   10.000       OFFSET       4.500
LIBRARY NUMBER      1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO     8    ABUNDANCE LIMIT (%)   80.00

    995        78        72        90        89        72        81        70
   1002        68        77        79        71        81        73        70
   1009        70        67        76        86        72        64        82
   1016        65        91       100       106       142       190       215
   1023       193       229       185       135       103        82        70
   1030        74        65        72        60        82        71        64
   1037        78        67        75        67        76        74        69
   1044        92        54        64        77        64        78        73
PERCENT COPPER                              .0558
   % RSD COUNTING        5.6
   1101        71        78       101        87        83        87        94
   1108        79        76        86       100        82       108        88
   1115        85       116       149       189       177       177       142
   1122       163       191       347       861      2479      6304     11708
   1129     15189     13445      8172      3077       810       168        43
   1136        25        21        27        22        13        22        15
   1143        19        23        16         9        17        21        11
   1150        13        18        19        26        25        23        15
PERCENT ANTIMONY                            .5157
   % RSD COUNTING         .4
   1287        12        11        13        18        35        43        50
   1294        54        34        13        12         8        13        13
   1301        14         9        14         9        10         8         8
   1308        17         9         9        18        12         9        19
   1315        27        15        15        19         7        13        17
   1322        10        14        10        10        11         6        17
   1329        13         7         6        11        10        11        16
   1336        14        12        16        13        14        14        10
PERCENT ARSENIC                             .0050
   % RSD COUNTING       29.6
CENTROID CHANNEL COPPER        1023    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      318.75    BACKGROUND SPACING:
                 ANTIMONY    206.43       COPPER    25
                 ARSENIC      41.10       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1055:38

91119065 RF   PB   Q369C

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 2130:29   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   8824.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                   NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

   994   74   66   67   81   72   61   64
  1001   58   78   64   72   62   56   62
  1008   69   72   62   70   76   52   59
  1015   66   69   63   84   112   126   178
  1022   177   187   199   152   106   95   65
  1029   78   63   54   60   60   55   51
  1036   54   71   71   55   55   49   60
  1043   59   55   54   66   46   69   54
PERCENT COPPER   .0599
   % RSD COUNTING   5.7
  1101   62   76   78   60   77   67   68
  1108   79   74   72   81   83   75   86
  1115   74   83   119   150   173   161   154
  1122   138   167   264   695   1999   5214   9706
  1129   12802   11181   6957   2678   687   134   44
  1136   26   23   18   14   19   20   16
  1143   18   17   13   17   17   17   13
  1150   16   16   16   13   14   19   18
PERCENT ANTIMONY   .5074
   % RSD COUNTING   .4
  1287   12   9   12   15   25   38   59
  1294   35   33   14   14   13   7   11
  1301   14   8   10   6   15   6   7
  1308   14   11   15   10   11   16   16
  1315   26   14   17   19   8   9   9
  1322   11   6   11   11   5   9   10
  1329   14   9   12   14   15   11   8
  1336   14   9   9   11   12   7   8
PERCENT ARSENIC   .0076
   % RSD COUNTING   22.7
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1057:31

91119065 RF            PB                      Q370A

SAMPLE TIME           26DEC79 1027:00   LOCATION    AFFRI
ACQUISITION TIME      28DEC79 2140:52   TYPE        COR 5M
PRESET TIME      600  SEC               GEOMETRY    SHELF 1        0.250
ELAPSED TIME     609  SEC               VOLUME      UG          8219.000
LIVE TIME        600  SEC               DETECTOR    GELI 15

CALIBRATION DATE     28DEC79 0952:04    KEV/CH          0.500
                                        OFFSET          0.546

                     NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =     2.000             SLOPE        0.500 E-3
SENSITIVITY      16   B =    10.000             OFFSET       4.500
LIBRARY NUMBER    1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)  80.00

   995      58       61       63       54       52       72       70
  1002      64       65       63       57       60       71       56
  1009      65       65       62       48       46       69       65
  1016      65       74       69       87      130      147      182
  1023     185      165      129      112       78       68       71
  1030      58       66       63       61       55       64       47
  1037      68       47       60       57       51       53       54
  1044      45       56       58       55       58       71       55
PERCENT  COPPER                            .0597
    % RSD COUNTING       6.0
  1101      59       71       69       80       63       60       58
  1108      67       72       63       78       68       61       76
  1115      71      101       94      124      156      146      144
  1122     145      139      274      687     1904     4782     9038
  1129   12057    10628     6677     2611      721      141       36
  1136      26       16       22       20       23       18       14
  1143      12       12       14       14       18       16       18
  1150      19       15       14       13       16       14       13
PERCENT  ANTIMONY                          .5150
    % RSD COUNTING        .4
  1287      14       12       15       17       32       33       62
  1294      42       24       17       11       11       11        9
  1301      10       15       12        8        9       10        8
  1308      11        3        6        3        9        8       10
  1315      25       23       19       16        9        8       10
  1322      10       15        9        8        7        5        9
  1329       8        4       11        5        9       10        8
  1336      10        9       12        9       11       11       11
PERCENT  ARSENIC                           .0065
    % RSD COUNTING       28.4
CENTROID CHANNEL COPPER      1023    HALF-LIFE CU-64      768 MIN.
                 ANTIMONY    1129              SB-122    4043 MIN.
                 ARSENIC     1315              AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER    318.75    BACKGROUND SPACING:
                 ANTIMONY  206.43       COPPER    25
                 ARSENIC    41.10       ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

91119065 RF   PB   Q370B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 2151:14	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	611 SEC	VOLUME	UG 10431.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

```
                     NORMALIZATION CONSTANTS   GAMMA
FWHM              5    A =    2.000          SLOPE       0.500 E-3
SENSITIVITY     16    B =   10.000          OFFSET      4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00
```

```
  995     72     97     72     91     89     69     74
 1002     82     90     67     73     70     76     70
 1009     71     68     75     74     84     82     74
 1016     92     94    103    134    166    200    232
 1023    201    206    156    135     85    117     79
 1030     79     72     76     49     84     71     74
 1037     70     72     49     70     85     79     52
 1044     87     77     84     77     82     70     82
```

PERCENT COPPER   .0547
    % RSD COUNTING   5.9

```
 1101     82     90     80     66     82     78     66
 1108    ·78     83     75     77     75     94     87
 1115     93     99    140    183    189    194    182
 1122    168    200    332    832   2517   6117  11658
 1129  15476  13604   8330   3293    931    175     40
 1136     26     22     22     30     19     23     12
 1143     23     17     21     21     18     17     20
 1150     25     15     16     17     15     16     19
```

PERCENT ANTIMONY   .5202
    % RSD COUNTING   .4

```
 1288     14     24     19     35     48     55     58
 1295     31     17     16      9     11     14     17
 1302      7     12     13     11      9      7     14
 1309     11      8     11      9      6     17     21
 1316     18     19     15     10      3     16     12
 1323     14      9     12     13      9     10      9
 1330     12      8      7     11     16     13      9
 1337     13     10     17     16     15     10      9
```

PERCENT ARSENIC   .0034
    % RSD COUNTING   43.2

```
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129             SB-122  4043 MIN.
                 ARSENIC     1316             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER     318.75  BACKGROUND SPACING:
                 ANTIMONY   206.43     COPPER    25
                 ARSENIC     41.10     ANTIMONY  25
CONSTANTS:                            ARSENIC   10
   E=2.7183                        BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1101:19

91119065 RF   PB   0370C

SAMPLE TIME		26DEC79 1027:00	LOCATION	AFFRI		
ACQUISITION TIME		28DEC79 2201:39	TYPE	COR 5M		
PRESET TIME	600 SEC		GEOMETRY	SHELF 1	0.250	
ELAPSED TIME	609 SEC		VOLUME	UG	8939.000	
LIVE TIME	600 SEC		DETECTOR	GELI 15		

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

995	81	78	72	63	78	62	75
1002	64	59	72	68	70	73	73
1009	60	72	72	73	70	70	65
1016	76	83	82	119	119	142	187
1023	198	172	148	124	86	80	67
1030	71	70	51	67	67	59	56
1037	56	58	79	60	58	62	58
1044	61	55	67	65	65	61	61

PERCENT COPPER   .0549
   % RSD COUNTING   6.3

1101	60	56	71	84	69	69	73
1108	76	84	77	77	73	70	72
1115	81	94	109	128	161	185	140
1122	134	166	288	740	2100	5254	9899
1129	13101	11700	7073	2749	697	136	35
1136	22	15	22	10	17	21	15
1143	12	21	19	17	8	16	13
1150	14	18	14	14	20	19	17

PERCENT ANTIMONY   .5170
   % RSD COUNTING   .4

1287	9	7	10	19	27	35	43
1294	49	26	21	11	18	9	9
1301	12	7	13	5	12	2	5
1308	7	5	12	9	15	11	18
1315	19	21	13	15	11	15	10
1322	8	11	7	9	8	12	9
1329	13	15	13	3	7	5	11
1336	9	9	19	17	9	4	13

PERCENT ARSENIC   .0069
   % RSD COUNTING   24.5

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1103:13

91119065 RF   PB   Q371A

SAMPLE TIME	26DEC79 1027:00	LOCATION AFFRI
ACQUISITION TIME	28DEC79 2212:02	TYPE COR 5M
PRESET TIME 600 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 615 SEC		VOLUME UG 8251.000
LIVE TIME 600 SEC		DETECTOR GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

996	105	123	103	110	90	103	87
1003	110	116	113	116	92	107	106
1010	103	110	90	92	79	111	99
1017	106	114	127	134	200	234	219
1024	185	157	141	135	104	112	106
1031	96	97	105	92	102	81	90
1038	88	101	96	99	101	93	91
1045	97	85	87	86	91	75	81

PERCENT COPPER   .0589

% RSD COUNTING   7.2

1101	104	113	126	108	109	92	117
1108	101	96	110	123	90	109	138
1115	144	208	341	512	617	596	415
1122	325	306	473	1223	3390	8379	15247
1129	19750	17460	10227	3931	1014	208	75
1136	45	41	35	27	34	30	36
1143	28	29	35	25	26	35	27
1150	25	25	25	27	20	21	20

PERCENT ANTIMONY   .8480

% RSD COUNTING   .3

1286	19	15	10	10	38	52	69
1293	68	58	35	30	20	17	16
1300	16	14	13	16	20	19	15
1307	15	20	17	17	26	25	36
1314	44	80	72	58	25	25	15
1321	10	12	21	21	18	15	12
1328	9	13	11	20	14	21	19
1335	16	16	10	18	23	22	12

PERCENT ARSENIC   .0314

% RSD COUNTING   9.6

CENTROID CHANNEL COPPER	1024	HALF-LIFE CU-64	768	MIN.
ANTIMONY	1129	SB-122	4043	MIN.
ARSENIC	1314	AS-76	1584	MIN.
COUNTS/MICROGRAM COPPER	318.75	BACKGROUND SPACING:		
ANTIMONY	206.43	COPPER	25	
ARSENIC	41.10	ANTIMONY	25	

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1105:06

91119065 RF   PB   Q371B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 2222:30   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   616 SEC   VOLUME   UG   9463.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

    994   105   118   126   135   101   123   109
   1001   134   110   103   105   92   120   120
   1008   128   109   110   106   103   85   106
   1015   115   99   106   116   180   183   268
   1022   206   253   251   187   170   134   114
   1029   121   103   113   104   123   83   101
   1036   118   81   103   111   115   95   105
   1043   106   104   114   96   91   99   101
PERCENT COPPER   .0645
   % RSD COUNTING   6.3
   1101   115   139   144   110   124   128   121
   1108   130   123   127   144   140   119   122
   1115   155   239   346   541   721   625   475
   1122   323   306   514   1259   3808   9072   16726
   1129   21639   18929   11279   4403   1115   232   83
   1136   68   42   30   36   36   29   36
   1143   42   30   31   38   23   33   35
   1150   30   22   22   18   34   32   32
PERCENT ANTIMONY   .8108
   % RSD COUNTING   .3
   1288   11   31   40   39   89   80   71
   1295   39   29   19   26   17   23   15
   1302   19   21   8   16   18   17   18
   1309   25   23   20   20   32   51   64
   1316   87   68   41   26   13   17   18
   1323   15   10   20   6   15   19   14
   1330   15   22   23   18   19   16   15
   1337   22   15   23   15   21   17   19
PERCENT ARSENIC   .0330
   % RSD COUNTING   8.1
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1107:00

91113065 RF   PB   Q371C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 2233:00	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	613 SEC	VOLUME	UG 7072.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                          OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	83	80	94	98	104	98	92
1002	74	94	85	95	83	85	86
1009	98	78	97	71	83	73	94
1016	82	85	87	118	162	155	182
1023	176	163	124	132	101	97	91
1030	91	93	76	68	69	80	78
1037	76	81	71	79	79	88	80
1044	73	81	73	80	73	67	90

PERCENT COPPER   .0570
   % RSD COUNTING   8.3

1101	83	94	110	72	80	94	92
1108	97	75	109	115	93	94	106
1115	113	182	284	399	522	513	404
1122	244	222	434	976	2752	7059	12989
1129	17086	14735	8886	3429	919	181	42
1136	25	30	32	24	22	22	24
1143	32	24	25	20	17	24	19
1150	22	23	25	17	19	15	26

PERCENT ANTIMONY   .8480
   % RSD COUNTING   .3

1287	10	15	7	32	48	49	58
1294	71	34	33	13	16	15	19
1301	14	16	12	13	11	9	9
1308	14	12	11	17	14	25	33
1315	50	81	35	38	14	17	15
1322	11	15	11	8	13	15	8
1329	6	9	16	20	15	19	12
1336	13	16	6	18	11	12	10

PERCENT ARSENIC   .0325
   % RSD COUNTING   9.7

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.	
	ANTIMONY	1129	SB-122	4043 MIN.	
	ARSENIC	1315	AS-76	1584 MIN.	
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43	COPPER	25	
	ARSENIC	41.10	ANTIMONY	25	
CONSTANTS:			ARSENIC	10	
E=2.7183			BACKGROUND CHANNELS 10		
LN2=.69315					

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1108:54

91119065 RF   PB   Q372A

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 2243:26   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   8700.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                          OFFSET   0.546

                       NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

      994   81   45   72   60   64   56   75
     1001   62   62   63   48   58   58   84
     1008   51   74   55   73   56   76   57
     1015   70   80   72   70   96   114   172
     1022   164   198   164   138   95   85   57
     1029   68   46   49   57   72   56   59
     1036   55   59   60   62   63   55   60
     1043   71   48   58   55   60   49   62
PERCENT COPPER   .0605
   % RSD COUNTING   5.9
     1101   66   60   56   64   58   79   68
     1108   72   63   62   69   73   64   92
     1115   70   93   103   151   149   155   130
     1122   127   161   278   706   1994   5044   9418
     1129   12448   11114   6623   2702   742   122   27
     1136   18   15   9   20   12   18   10
     1143   14   18   9   16   17   14   19
     1150   14   12   11   13   10   11   17
PERCENT ANTIMONY   .5092
   % RSD COUNTING   .4
     1288   9   16   8   22   41   44   49
     1295   19   18   7   8   14   6   14
     1302   14   10   14   5   10   4   9
     1309   9   8   6   5   15   24   18
     1316   13   15   10   12   11   7   9
     1323   8   5   6   9   8   6   13
     1330   12   7   10   9   7   8   8
     1337   10   4   12   8   13   7   6
PERCENT ARSENIC   .0073
   % RSD COUNTING   23.5
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
  E=2.7183   .   BACKGROUND CHANNELS 10
  LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1110:48

91119065 RF              PB                        0372B

SAMPLE TIME              26DEC79 1027:00   LOCATION    AFFRI
ACQUISITION TIME         28DEC79 2253:48   TYPE        COR 5M
PRESET TIME        600 SEC                 GEOMETRY    SHELF 1      0.250
ELAPSED TIME       608 SEC                 VOLUME      UG        8205.000
LIVE TIME          600 SEC                 DETECTOR    GELI 15

CALIBRATION DATE         28DEC79 0952:04   KEV/CH        0.500
                                           OFFSET        0.546

                      NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =     2.000          SLOPE      0.500 E-3
SENSITIVITY       16    B =    10.000          OFFSET     4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    995       63       59       66       53       61       46       71
   1002       62       57       54       47       49       56       62
   1009       59       74       63       52       53       48       66
   1016       58       69       78       93      108      143      151
   1023      164      155      127      101       67       72       61
   1030       53       51       45       52       48       46       57
   1037       56       48       48       52       58       62       47
   1044       52       45       45       56       52       55       55
PERCENT COPPER                        .0572
   % RSD COUNTING         6.4
   1101       48       54       71       64       55       49       57
   1108       62       59       64       59       62       77       70
   1115       81       77       90      119      162      136      125
   1122      107      163      238      633     1770     4521     8591
   1129    11530    10330     6335     2446      678      127       30
   1136       24       19       15       10       16       22       15
   1143       13       21        8       10       11       15       25
   1150       10       13       12       15       12       18       12
PERCENT ANTIMONY                      .4989
   % RSD COUNTING          .4
   1286       13        8       12       11       18       40       26
   1293       37       41       27       10        8        8        8
   1300        1        8        9        5        6        9        9
   1307       12        9        6        5       11        8       15
   1314       10       18       14        9        9       10       12
   1321        9        9        5        2       15        9        8
   1328        4        5       10       11       10        6        7
   1335        7       13        6        8        6        9       12
PERCENT ARSENIC                       .0044
   % RSD COUNTING         38.8
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129             SB-122   4043 MIN.
                 ARSENIC       1314             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER       318.75  BACKGROUND SPACING:
                 ANTIMONY     206.43     COPPER     25
                 ARSENIC       41.10     ANTIMONY   25
CONSTANTS:                               ARSENIC    10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1112:42

91119065 RF   PB   Q372C

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   28DEC79 2304:10   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   8446.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

   994   60   64   60   65   57   52   54
  1001   63   62   66   77   73   44   60
  1008   62   67   56   70   58   62   64
  1015   66   63   68   69   97   139   157
  1022   167   183   157   131   93   73   73
  1029   59   57   58   60   52   39   51
  1036   41   47   57   52   60   56   60
  1043   57   57   56   56   51   49   56
PERCENT COPPER   .0631
   % RSD COUNTING   5.9
  1101   59   69   67   71   79   53   62
  1108   55   79   71   82   76   67   73
  1115   67   67   80   151   154   153   130
  1122   133   157   292   646   1894   4710   8958
  1129   11984   10721   6630   2613   695   149   28
  1136   25   17   15   11   23   14   11
  1143   22   18   26   12   18   16   14
  1150   14   9   11   14   18   11   13
PERCENT ANTIMONY   .5065
   % RSD COUNTING   .4
  1287   10   12   15   13   25   35   53
  1294   58   27   18   9   7   12   4
  1301   5   6   6   10   10   11   4
  1308   3   5   8   9   20   14   8
  1315   13   15   14   10   9   13   14
  1322   5   8   4   8   7   10   9
  1329   10   4   6   15   7   8   11
  1336   7   9   11   15   17   11   7
PERCENT ARSENIC   .0055
   % RSD COUNTING   30.9
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY   25
CONSTANTS: ARSENIC   10
  E=2.7183   BACKGROUND CHANNELS 10
  LN2=.69315

EXPERIMENT 1   31DEC79 1114:36

91119065 RF   PB   Q341A

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 2314:32	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	611 SEC	VOLUME	UG 7710.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	85	84	87	63	79	86	76
1002	81	82	88	54	78	65	70
1009	69	90	77	76	92	78	86
1016	78	84	101	120	134	172	215
1023	204	214	182	139	99	91	75
1030	78	58	66	67	66	76	66
1037	72	72	63	72	67	73	73
1044	70	68	77	83	68	65	70

PERCENT COPPER   .0798
    % RSD COUNTING   5.8

1101	83	68	74	74	84	78	81
1108	73	93	74	81	82	85	91
1115	117	125	186	279	347	309	292
1122	205	191	313	808	2444	5743	11274
1129	14775	13430	8258	3316	890	205	48
1136	38	30	21	24	13	25	25
1143	20	27	13	17	20	16	15
1150	13	17	26	15	18	12	20

PERCENT ANTIMONY   .6934
    % RSD COUNTING   .4

1288	9	13	17	35	56	63	47
1295	35	14	14	19	6	3	11
1302	15	15	11	13	12	8	13
1309	9	10	12	13	27	34	36
1316	47	17	17	19	13	13	10
1323	9	9	8	5	11	9	15
1330	7	13	6	11	12	16	11
1337	9	18	10	15	9	12	12

PERCENT ARSENIC   .0199
    % RSD COUNTING   12.7

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1116:30

91119065 RF   PB   Q341B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 2324:56	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	612 SEC	VOLUME	UG 8460.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

995	91	90	85	91	80	75	105
1002	93	82	97	89	71	74	82
1009	73	84	78	83	84	84	89
1016	83	113	125	138	149	239	224
1023	246	202	175	140	114	104	102
1030	71	68	93	90	71	84	70
1037	73	87	79	81	76	63	71
1044	75	81	84	82	77	85	83

PERCENT COPPER   .0801
    % RSD COUNTING   5.5

1101	67	80	84	87	74	91	74
1108	106	92	84	99	95	87	116
1115	109	123	218	302	367	354	278
1122	206	223	340	908	2661	6428	12310
1129	16386	15006	9149	3706	1026	192	56
1136	37	37	31	26	23	22	27
1143	25	25	22	23	19	20	16
1150	22	20	23	14	19	19	17

PERCENT ANTIMONY   .7016
    % RSD COUNTING   .3

1288	13	11	27	48	55	60	81
1295	37	18	18	17	14	14	11
1302	11	9	19	14	10	13	12
1309	16	10	9	11	28	23	37
1316	37	33	23	14	8	10	18
1323	8	10	11	7	5	10	14
1330	11	9	11	18	14	13	16
1337	12	10	15	11	14	14	14

PERCENT ARSENIC   .0167
    % RSD COUNTING   14.0

CENTROID CHANNEL	COPPER	1023	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1316		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43		COPPER	25
	ARSENIC	41.10		ANTIMONY	25
CONSTANTS:				ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10		
LN2=.69315					

EXPERIMENT 1   31DEC79 1118:24

91119065 RF   PB   Q341C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	28DEC79 2335:22	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	612 SEC	VOLUME	UG 8671.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	95	85	92	106	78	85	86
1002	100	110	95	93	91	97	78
1009	83	74	88	81	95	88	93
1016	89	107	99	121	147	194	230
1023	240	208	186	169	108	108	87
1030	67	85	104	93	102	83	81
1037	73	65	84	80	75	82	76
1044	68	84	83	93	72	63	81

PERCENT COPPER   .0784
% RSD COUNTING   5.6

1101	95	73	90	87	72	89	91
1108	98	104	78	97	102	90	101
1115	109	158	211	324	372	383	310
1122	215	217	357	889	2650	6554	12511
1129	16805	15662	9541	3906	1137	243	64
1136	31	36	15	28	24	21	19
1143	28	22	17	25	23	21	22
1150	22	17	22	21	19	19	13

PERCENT ANTIMONY   .7066
% RSD COUNTING   .3

1287	12	10	17	33	36	50	72
1294	54	28	17	18	15	9	22
1301	16	13	10	15	16	16	16
1308	14	14	16	16	22	25	28
1315	36	34	32	29	14	10	15
1322	10	9	14	4	12	15	19
1329	11	9	13	6	21	10	6
1336	7	10	18	11	10	15	12

PERCENT ARSENIC   .0163
% RSD COUNTING   14.6

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS	10
LN2=.69315				

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1120:18

91119065 RF            PB                      0342A

SAMPLE TIME           26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME      28DEC79 2345:48   TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1       0.250
ELAPSED TIME     611 SEC                VOLUME     UG         8041.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE      28DEC79 0952:04   KEV/CH        0.500
                                        OFFSET        0.546

                    NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000        SLOPE       0.500 E-3
SENSITIVITY       16    B =   10.000        OFFSET      4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

     995      76      81      76      70      89      77      78
    1002      74      83      88      69      91      85      77
    1009      71      79      66      83      75      72      89
    1016      94      82     102     111     125     134     152
    1023     157     131     143     131      99      73      76
    1030      79      65      69      82      66      78      79
    1037      70      69      67      74      74      79      76
    1044      75      56      80      53      72      70      61
PERCENT COPPER                             .0501
   % RSD COUNTING       8.3
    1101      72      85      69      89      97      86      85
    1108      88      86      99     107      87      82      95
    1115     126     151     200     326     367     405     295
    1122     202     195     313     786    2303    5748   11315
    1129   14969   14200    8846    3678    1062     211      51
    1136      28      31      16      20      20      31      23
    1143      18      22      19      13      20      10      12
    1150      18      17      13      24      16      15      13
PERCENT ANTIMONY                           .6888
   % RSD COUNTING       .4
    1287      17      14       8      21      32      50      57
    1294      55      35      16      19       8      15      10
    1301       9      16      11      10       9       8       6
    1308       8      16       8      12      18      18      33
    1315      45      45      30      23      15      13      12
    1322       8       8       7       5       6      10       7
    1329       8      12      12       9      16      10       7
    1336       9      15      12      12      10       9       8
PERCENT ARSENIC                            .0236
   % RSD COUNTING      10.4
CENTROID CHANNEL COPPER         1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY       1129             SB-122   4043 MIN.
                 ARSENIC        1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER       318.75   BACKGROUND SPACING:
                 ANTIMONY     206.43      COPPER    25
                 ARSENIC       41.10      ANTIMONY  25
CONSTANTS:                                ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1122:11

91119065 RF            PB                        0342B

SAMPLE TIME          26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME     28DEC79 2356:13   TYPE       COR 5M
PRESET TIME      600 SEC               GEOMETRY   SHELF 1      0.250
ELAPSED TIME     612 SEC               VOLUME     UG         8263.000
LIVE TIME        600 SEC               DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04   KEV/CH        0.500
                                       OFFSET        0.546

                     NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000         SLOPE        0.500 E-3
SENSITIVITY       16    B =   10.000         OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    995      85      95     101      74      86      97      71
   1002      84      81      93      86      88      81      91
   1009      88      72      97      70      73      66      88
   1016      81     102      89     107     116     132     163
   1023     162     141     138     133      92      82      76
   1030      63      73      72      65      77      66      68
   1037      92      74      75      80      67      77      67
   1044      86      61      63      68      94      87      92
PERCENT  COPPER                       .0410
   % RSD COUNTING      10.3
   1101      85      91      93      77      85      94      80
   1108      93     107     103      93      89      93      90
   1115     110     124     207     328     400     435     312
   1122     210     213     318     800    2325    5936   11468
   1129   15456   14338    9172    3791    1128     229      45
   1136      32      28      23      32      15      12      29
   1143      16      20      24      21      21      20      11
   1150      16      23      20      19       6      15      14
PERCENT  ANTIMONY                     .6872
   % RSD COUNTING       .4
   1288      15      16      25      34      61      68      62
   1295      37      26      16      11      10      14      14
   1302       9      16       7      13      10      13      10
   1309      15       7       9      15      21      25      36
   1316      51      42      27      16      13      13       8
   1323       9       9      11       5      10      11       6
   1330      14      16       8      13      11      14      13
   1337       9      18      18      12      13      13      12
PERCENT  ARSENIC                      .0220
   % RSD COUNTING      11.3
CENTROID CHANNEL COPPER       1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY     1129             SB-122  4043 MIN.
                 ARSENIC      1316             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER     318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43      COPPER    25
                 ARSENIC     41.10      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1124:05

91119065 RF              PB                    0342C

SAMPLE TIME          26DEC79 1027:00    LOCATION   AFFRI
ACQUISITION TIME     29DEC79 0006:38    TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1        0.250
ELAPSED TIME     611 SEC                VOLUME     UG          8036.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04    KEV/CH         0.500
                                        OFFSET         0.546

                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2.000            SLOPE        0.500 E-3
SENSITIVITY     16   B =   10.000            OFFSET       4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

    995     65     78     94     82     90     72     86
   1002     97     76     71     70     82     59     80
   1009     78     76     83     82     71     86     91
   1016     86     88     87    115    101    145    132
   1023    146    159    136    118     91     77     63
   1030     61     83     76     79     54     66     73
   1037     75     82     78     70     73     55     63
   1044     64     63     76     71     72     74     67
PERCENT COPPER                        .0435
   % RSD COUNTING      9.7
   1101     85     83     73     90     84     78     93
   1108     90     93     98    110     87    103     96
   1115    110    139    213    309    408    398    321
   1122    210    226    341    816   2264   5768  11218
   1129  15191  14125   8755   3623   1021    187     59
   1136     24     17     24     28     21     20     30
   1143     17     28     18     18     21     20     15
   1150     13     24     17     23     13     19     15
PERCENT ANTIMONY                      .6905
   % RSD COUNTING       .4
   1287     15     16     11     20     30     49     52
   1294     53     43     20     18     12     16     15
   1301      8      9     12     12     14     12     10
   1308      8     11     18      6     16     27     30
   1315     31     54     47     28     15     14      9
   1322      7      4      8     10      8     13      4
   1329     14     10     11     11      7      9     10
   1336      9     15     13     17     21     14     11
PERCENT ARSENIC                       .0246
   % RSD COUNTING     10.8
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129             SB-122   4043 MIN.
                 ARSENIC       1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      318.75   BACKGROUND SPACING:
                 ANTIMONY    206.43      COPPER    25
                 ARSENIC      41.10      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1125:59

91119065 RF   PB   Q343A

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0017:03   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   614 SEC   VOLUME   UG.   9199.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                          OFFSET   0.546

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER 1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8 ABUNDANCE LIMIT (%)   80.00

994	92	123	104	99	104	107	100
1001	97	94	85	88	101	108	95
1008	95	107	93	88	99	88	88
1015	91	99	116	112	146	151	209
1022	229	267	229	224	136	135	94
1029	107	108	97	83	87	87	99
1036	92	86	93	82	91	100	91
1043	90	89	89	85	82	84	85

PERCENT COPPER   .0762
    % RSD COUNTING   5.9

1101	102	95	98	120	96	96	98
1108	96	110	105	130	128	116	108
1115	135	170	217	334	400	409	320
1122	219	251	374	977	2925	7384	13899
1129	18540	17186	10732	4356	1216	263	86
1136	38	31	36	33	34	29	27
1143	25	34	23	26	34	23	17
1150	23	23	19	21	12	22	19

PERCENT ANTIMONY   .7440
    % RSD COUNTING   .3

1288	18	17	31	29	57	62	63
1295	46	29	17	16	21	16	16
1302	18	13	13	15	15	14	12
1309	15	10	17	14	24	37	40
1316	46	38	30	24	15	11	12
1323	18	9	16	11	11	10	15
1330	19	15	18	16	14	11	11
1337	7	11	16	15	17	13	19

PERCENT ARSENIC   .0202
    % RSD COUNTING   11.9

CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1127:53

91119065 RF   PB   Q343B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME	29DEC79 0027:30	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	612 SEC	VOLUME	UG	8061.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER 1   ENERGY TOLERANCE ·   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

995	61	78	99	80	98	95	102
1002	80	73	79	89	79	81	99
1009	88	95	84	84	87	92	82
1016	92	102	103	130	151	174	221
1023	217	177	174	137	107	99	73
1030	70	85	71	69	75	80	79
1037	81	82	75	72	75	64	66
1044	81	81	85	72	73	86	70

PERCENT COPPER   .0747
   % RSD COUNTING   6.4

1101	82	83	85	86	102	107	85
1108	96	81	89	75	114	95	121
1115	126	133	231	269	355	358	278
1122	213	246	338	882	2477	6417	12190
1129	16255	15258	9653	3955	1162	239	52
1136	37	23	20	31	28	23	30
1143	23	22	18	22	27	23	20
1150	18	14	16	24	22	22	19

PERCENT ANTIMONY   .7502
   % RSD COUNTING   .3

1288	10	20	25	39	47	67	55
1295	43	31	19	16	17	11	13
1302	17	10	11	8	8	12	16
1309	13	9	12	17	24	25	24
1316	47	27	19	19	15	14	11
1323	9	13	12	11	5	19	14
1330	14	11	8	16	11	16	5
1337	14	14	13	16	24	14	15

PERCENT ARSENIC   .0160
   % RSD COUNTING   15.5

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1129:47

91119065 RF   PB   0343C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0037:56	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	614 SEC	VOLUME	UG 9036.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

995	101	108	99	104	81	97	84
1002	92	97	113	103	97	102	106
1009	87	100	94	102	84	77	93
1016	92	107	102	143	169	211	261
1023	240	257	192	170	131	117	107
1030	98	98	75	94	88	93	113
1037	89	93	79	84	77	71	87
1044	87	89	80	88	100	99	96

PERCENT COPPER   .0842
   % RSD COUNTING   5.5

1101	92	91	110	100	82	89	90
1108	106	105	105	105	123	87	123
1115	127	177	189	335	381	372	307
1122	223	246	393	965	2885	7280	13832
1129	18610	16975	10458	4276	1255	241	60
1136	36	27	31	40	20	28	22
1143	28	24	25	28	24	26	24
1150	18	22	32	27	28	14	21

PERCENT ANTIMONY   .7529
   % RSD COUNTING   .3

1286	15	13	9	19	22	33	52
1293	71	78	50	23	18	11	18
1300	14	11	14	16	12	9	7
1307	11	15	12	20	21	14	19
1314	40	40	38	37	14	15	11
1321	14	14	11	13	9	5	17
1328	14	9	14	16	17	21	18
1335	14	11	23	15	14	18	20

PERCENT ARSENIC   .0182
   % RSD COUNTING   12.8

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1314	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1131:40

91119065 RF            PB                      0344A

SAMPLE TIME           26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME      29DEC79 0048:23   TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1       0.250
ELAPSED TIME     612 SEC                VOLUME     UG          8678.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE      28DEC79 0952:04   KEV/CH        0.500
                                        OFFSET        0.546


                   NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =   2.000          SLOPE        0.500 E-3
SENSITIVITY     16    B =  10.000          OFFSET       4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

   995       87       92       80       93       87       78       93
  1002       94       79       75      108       84      100       90
  1009       93       82       77       78       66       89       78
  1016       95       91       81      117      139      149      186
  1023      173      149      156      134      117       85      103
  1030       71       76       82       72       81       76       66
  1037       69       75       81       78       67       81       88
  1044       83       64       75       68       93       75       90
PERCENT COPPER                        .0535
   % RSD COUNTING       8.0
  1101       97      100       83      104       76       90       91
  1108       86       86       84      113       88      100       95
  1115      120      125      204      280      406      364      291
  1122      224      208      351      836     2463     6469    12145
  1129    16884    15325     9338     3899     1120      241       58
  1136       44       31       28       30       22       25       26
  1143       23       16       24       21       23       22       16
  1150       14       19       23       14       28       25       18
PERCENT ANTIMONY                      .7028
   % RSD COUNTING        .3
  1287       14       14       20       21       34       52       61
  1294       57       30       18       12       13       15        6
  1301       10       11       10       15        6        8       19
  1308       19       14       10       13       19       14       33
  1315       41       34       30       17       10       11       12
  1322        8       15       15       10        9       12        7
  1329        8       10        8       12       16        4       14
  1336       20       19       12        9       10       16        8
PERCENT ARSENIC                       .0151
   % RSD COUNTING       15.7
CENTROID CHANNEL COPPER       1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY     1129             SB-122  4043 MIN.
                 ARSENIC      1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER     318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43      COPPER    25
                 ARSENIC     41.10      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1133:34

91119065 RF   PB   Q344B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0058:49   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   613 SEC   VOLUME   UG   9911.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                          OFFSET   0.546

                       NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    995   80   92   93   83   93   89   88
   1002   85   94   103   97   95   96   86
   1009   95   92   98   85   98   98   79
   1016   93   89   123   111   140   190   200
   1023   210   211   152   125   125   92   89
   1030   96   85   75   82   96   85   87
   1037   88   75   76   79   80   89   83
   1044   72   78   87   101   77   86   85
PERCENT COPPER   .0570
   % RSD COUNTING   7.0
   1101   88   92   90   114   102   101   101
   1108   105   102   104   104   94   99   93
   1115   137   151   211   308   413   387   289
   1122   226   223   372   944   2756   7013   13146
   1129   17720   16134   10226   4251   1138   251   57
   1136   34   37   29   36   23   37   18
   1143   28   30   26   25   26   23   32
   1150   20   30   13   22   16   28   16
PERCENT ANTIMONY   .6602
   % RSD COUNTING   .3
   1288   13   17   16   35   64   82   69
   1295   47   27   10   19   12   15   11
   1302   23   17   17   10   14   8   9
   1309   6   13   17   15   18   31   40
   1316   45   37   26   22   13   12   12
   1323   18   14   17   16   14   8   10
   1330   11   9   22   16   15   12   16
   1337   15   21   19   24   13   14   16
PERCENT ARSENIC   .0165
   % RSD COUNTING   13.4
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1  31DEC79 1135:28

91119065 RF            PB                    0344C

SAMPLE TIME          26DEC79 1027:00    LOCATION   AFFRI
ACQUISITION TIME     29DEC79 0109:16    TYPE       COR 5M
PRESET TIME     600 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME    611 SEC                 VOLUME     UG        8005.000
LIVE TIME       600 SEC                 DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04    KEV/CH       0.500
                                        OFFSET       0.546

                     NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2.000          SLOPE        0.500 E-3
SENSITIVITY     16   B =   10.000          OFFSET       4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

     994       77        87        82        75        92        67        76
    1001       77        82        88        73        68        73        82
    1008       72        74        72        82        71        77        61
    1015       74        76        97        85        86       117       142
    1022      163       181       151       147        84        97        73
    1029       75        71        74        81        72        74        72
    1036       73        80        68        69        74        65        56
    1043       77        69        73        60        56        83        57
PERCENT COPPER                              .0557
  % RSD COUNTING        8.1
    1101       80        85        77        73        87        74        82
    1108       78        80        91        96        72        90       105
    1115      104       138       171       274       324       312       281
    1122      198       187       303       813      2209      5674     10895
    1129    14695     13769      8570      3548      1027       210        57
    1136       35        23        26        15        28        19        24
    1143       22        24        12        24        20        23        19
    1150       19        20        11        19        23        13        23
PERCENT ANTIMONY                            .6824
  % RSD COUNTING         .4
    1287       14        12        15        13        33        39        50
    1294       60        43        26        17        17        20        15
    1301       11         7         8        14         8        14         5
    1308       12        12         8         9        15        11        24
    1315       37        36        28        18         8        10         9
    1322       14         7        12         7         9        11         6
    1329       11        10         9        14        19         9        15
    1336       14        12        17        16        15        11        13
PERCENT ARSENIC                             .0161
  % RSD COUNTING       14.9
CENTROID CHANNEL COPPER       1022    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1129              SB-122   4043 MIN.
                 ARSENIC      1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      318.75   BACKGROUND SPACING:
                 ANTIMONY    206.43      COPPER    25
                 ARSENIC      41.10      ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1137:22

91119065 RF   PB   Q345A

```
SAMPLE TIME          26DEC79 1027:00    LOCATION   AFFRI
ACQUISITION TIME     29DEC79 0119:40    TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1        0.250
ELAPSED TIME     612 SEC                VOLUME     UG          9627.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04    KEV/CH        0.500
                                        OFFSET        0.546

                     NORMALIZATION CONSTANTS    GAMMA
FWHM               5   A =    2.000          SLOPE        0.500 E-3
SENSITIVITY       16   B =   10.000          OFFSET       4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%)  80.00

    995        79        77        96        92        93        80        81
   1002       110        92        82        81        92        77        79
   1009        95        92        92        69        63        72        73
   1016        94        90       120       117       140       138       164
   1023       181       158       148       121        88        76        74
   1030        88        93        86        80        83        89        82
   1037        85        78        79        66        91        81        68
   1044        83        85        86        80        84        98        78
PERCENT  COPPER                         .0438
   % RSD COUNTING      9.1
   1101        97        99        82        85       105       113        83
   1108       106       110        95       104        92        80        79
   1115       106       147       241       351       430       393       327
   1122       235       196       365       928      2522      6203     12012
   1129     16579     15051      9562      4023      1104       244        66
   1136        33        35        29        31        27        17        28
   1143        25        16        23        21        20        22        25
   1150        22        15        17        22        14        23        20
PERCENT  ANTIMONY                       .6313
   % RSD COUNTING       .3
   1287         7        12        17        15        35        53        56
   1294        51        23        18        13        16        13        13
   1301        13         8         6        12         8        17        12
   1308        15        15        10        13         9        25        34
   1315        48        48        32        16         5        16         9
   1322        12        12        10        13        12        12         9
   1329        11        10         7        15        14        12        13
   1336        10        17        11        15        11        16         7
PERCENT  ARSENIC                        .8174
   % RSD COUNTING      12.9
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129             SB-122  4043 MIN.
                 ARSENIC     1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER    318.75   BACKGROUND SPACING:
                 ANTIMONY  206.43       COPPER    25
                 ARSENIC    41.10       ANTIMONY  25
CONSTANTS.                             ARSENIC   10
   E-2.7153                         BACKGROUND CHANNELS 10
   LN2- 69315
```

EXPERIMENT 1   31DEC79 1129:15

91119065 F.F   FB   0345B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0130:06	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	612 SEC	VOLUME	UG 9559.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                          OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

994	80	75	84	78	86	79	72
1001	77	87	91	75	80	83	78
1008	78	84	90	85	89	79	68
1015	81	76	104	73	107	146	151
1022	151	163	142	147	104	106	66
1029	78	94	78	78	71	73	66
1036	74	72	88	72	68	88	78
1043	64	73	80	79	82	73	75

PERCENT COPPER   .0454
   % RSD COUNTING   8.7

1101	101	81	75	86	103	96	98
1108	107	94	91	90	82	97	102
1115	101	149	216	346	398	411	346
1122	225	210	341	883	2434	6155	11485
1129	15734	14633	9220	3912	1083	242	63
1136	27	27	24	23	27	19	17
1143	29	29	23	19	16	14	25
1150	17	14	13	25	20	19	19

PERCENT ANTIMONY   .6142
   % RSD COUNTING   .4

1288	19	6	25	37	50	60	57
1295	40	16	15	12	8	13	11
1302	10	9	10	10	14	7	10
1309	16	9	9	16	20	34	43
1316	44	36	20	20	14	12	9
1323	11	10	10	12	7	8	6
1330	11	17	21	11	15	11	11
1337	15	27	16	9	17	12	15

PERCENT ARSENIC   .0198
   % RSD COUNTING   11.3

CENTROID CHANNEL	COPPER	1022	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   31DEC79 1141:09

91119065 RF   PB   Q345C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0140:31	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	611 SEC	VOLUME	UG 9121.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B =	10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25			
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00			

994	87	79	71	73	81	94	88
1001	90	99	74	86	75	90	81
1008	97	85	73	72	89	73	82
1015	74	74	77	85	116	128	140
1022	134	149	142	152	106	72	80
1029	70	73	86	70	75	68	73
1036	73	71	86	75	68	80	72
1043	75	64	71	77	71	69	85

PERCENT COPPER   .0467
   % RSD COUNTING   8.8

1101	95	86	93	70	71	90	83
1108	79	98	83	74	99	88	92
1115	117	119	200	337	379	394	315
1122	209	207	279	780	2236	5863	11454
1129	15278	14226	8937	3790	1036	214	59
1136	31	28	20	24	19	31	25
1143	21	19	26	20	19	21	19
1150	21	16	20	25	13	22	16

PERCENT ANTIMONY   .6267
   % RSD COUNTING   .4

1288	21	14	20	41	48	63	59
1295	49	24	15	15	15	5	18
1302	11	6	12	8	11	10	12
1309	10	10	11	17	20	18	37
1316	45	41	25	24	15	16	9
1323	7	7	12	9	12	10	8
1330	6	10	15	10	4	11	14
1337	6	18	12	12	10	6	3

PERCENT ARSENIC   .0193
   % RSD COUNTING   12.1

CENTROID CHANNEL	COPPER	1022	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1143:03

91119065 RF   PB   0346A

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0150:56   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   610 SEC   VOLUME   UG   7810.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   996   75   79   82   75   68   77   67
  1003   81   54   62   83   87   79   69
  1010   73   87   82   75   72   59   79
  1017   75   106   81   99   123   147   126
  1024   134   127   92   102   59   76   65
  1031   66   59   65   64   75   51   58
  1038   79   69   67   55   47   65   58
  1045   60   59   73   68   75   67   84
PERCENT COPPER   .0409
   % RSD COUNTING   11.2
  1101   82   72   73   75   79   85   75
  1108   81   73   82   81   81   90   96
  1115   70   103   186   270   402   345   262
  1122   179   176   312   679   1931   5117   10146
  1129   13655   12495   8090   3315   932   239   51
  1136   27   36   31   25   15   27   21
  1143   21   13   23   28   23   16   23
  1150   14   17   13   18   17   9   14
PERCENT ANTIMONY   .6496
   % RSD COUNTING   .4
  1287   9   11   11   17   29   52   49
  1294   51   33   16   13   9   15   7
  1301   8   7   9   15   11   5   12
  1308   14   8   13   7   16   19   42
  1315   33   46   31   21   12   5   7
  1322   14   7   11   11   10   9   12
  1329   12   10   11   11   13   10   18
  1336   10   14   10   5   14   8   7
PERCENT ARSENIC   .0227
   % RSD COUNTING   12.0
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
  E=2.7183   BACKGROUND CHANNELS 10
  LN2=.69315

EXPERIMENT 1   31DEC79 1144:57

91119065 RF   PB   Q346B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0201:19   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   612 SEC   VOLUME   UG   9349.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                 NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER 1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

    995   79   82   81   89   70   77   83
   1002   93   82   84   106   89   89   85
   1009   91   90   90   87   87   81   75
   1016   91   93   96   96   137   146   149
   1023   172   169   124   103   78   74   92
   1030   91   80   87   75   84   76   76
   1037   76   83   63   62   72   81   79
   1044   76   84   80   78   75   93   62
PERCENT COPPER   .0473
   % RSD COUNTING   8.7
   1101   88   102   87   91   89   83   99
   1108   80   106   101   90   102   104   125
   1115   155   147   225   342   386   395   319
   1122   243   208   338   810   2460   6363   12166
   1129   16449   15178   9500   4062   1161   228   61
   1136   38   22   31   21   29   28   19
   1143   26   26   20   25   31   26   20
   1150   25   15   24   25   22   24   16
PERCENT ANTIMONY   .6571
   % RSD COUNTING   .3
   1288   13   15   23   35   53   57   60
   1295   51   26   17   10   7   17   13
   1302   15   12   10   10   16   12   11
   1309   13   15   9   14   26   28   41
   1316   53   34   31   16   15   9   9
   1323   10   12   14   9   10   13   9
   1330   13   15   11   14   15   13   20
   1337   19   13   15   12   9   6   18
PERCENT ARSENIC   .0203
   % RSD COUNTING   11.9
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC 10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1146:51

91119065 RF   PB   0346C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0211:45	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	612 SEC	VOLUME	UG 8758.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

995	87	92	85	90	85	82	75
1002	73	104	77	84	94	78	93
1009	69	71	79	91	90	82	95
1016	82	87	78	98	105	130	153
1023	148	148	124	118	100	80	69
1030	63	71	79	83	64	48	76
1037	73	69	66	75	87	63	70
1044	77	64	78	68	84	87	72

PERCENT COPPER   .0397
% RSD COUNTING   11.0

1101	89	76	88	76	91	72	88
1108	71	102	77	101	95	77	96
1115	147	136	203	312	426	363	310
1122	222	214	316	857	2454	5932	11464
1129	15626	14416	9102	3877	1144	240	52
1136	31	32	19	32	22	26	23
1143	25	23	25	17	23	22	19
1150	38	28	11	11	16	17	17

PERCENT ANTIMONY   .6680
% RSD COUNTING   .4

1288	13	9	23	19	55	62	64
1295	47	20	17	12	13	18	9
1302	8	11	11	12	10	8	6
1309	8	14	7	13	15	37	36
1316	31	36	21	18	7	11	10
1323	10	7	12	9	13	10	9
1330	16	13	8	11	15	10	12
1337	8	11	23	13	15	6	20

PERCENT ARSENIC   .0186
% RSD COUNTING   12.9

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS	10
LN2=.69315				

EXPERIMENT 1   31DEC79 1148:45

91119065 RF   PB   Q325A-1

SAMPLE TIME		26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME		29DEC79 0222:10	TYPE	COR 5M
PRESET TIME	600 SEC		GEOMETRY	SHELF 1 0.250
ELAPSED TIME	608 SEC		VOLUME	UG 8136.000
LIVE TIME	600 SEC		DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                             OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

				SLOPE	0.500 E-3
FWHM	5	A =	2.000	OFFSET	4.500
SENSITIVITY	16	B =	10.000		
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

994	66	79	59	52	67	62	56
1001	64	71	65	64	53	65	70
1008	60	71	59	45	62	48	51
1015	54	73	79	56	80	69	79
1022	88	97	72	91	72	66	46
1029	54	72	63	51	48	54	68
1036	52	57	40	68	53	48	51
1043	65	66	52	54	52	53	60

PERCENT COPPER   .0281
% RSD COUNTING   19.2

1101	56	66	39	77	66	57	74
1108	54	61	52	73	78	67	62
1115	70	85	91	142	152	169	130
1122	114	129	233	574	1607	4230	8246
1129	11233	10538	6922	2782	830	177	30
1136	22	15	14	17	12	17	14
1143	9	12	18	14	9	11	17
1150	8	17	11	14	18	16	10

PERCENT ANTIMONY   .5218
% RSD COUNTING   .4

1288	8	11	13	26	36	44	43
1295	33	17	10	4	14	7	13
1302	6	4	8	8	7	6	10
1309	10	13	11	7	7	11	22
1316	25	9	15	10	9	9	7
1323	11	6	12	4	10	6	8
1330	6	8	11	12	6	8	11
1337	11	14	4	9	5	8	8

PERCENT ARSENIC   .   .0072
% RSD COUNTING   27.4

CENTROID CHANNEL	COPPER	1022	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1316		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43	COPPER	25	
	ARSENIC	41.10	ANTIMONY	25	

CONSTANTS: ARSENIC   10
  E=2.7183   BACKGROUND CHANNELS 10
  LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1150:39

91119065 RF              PB                      0325A-2

SAMPLE TIME            26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME       29DEC79 0232:32   TYPE       COR 5M
PRESET TIME      600 SEC                 GEOMETRY   SHELF 1        0.250
ELAPSED TIME     610 SEC                 VOLUME     UG         9371.000
LIVE TIME        600 SEC                 DETECTOR   GELI 15

CALIBRATION DATE       28DEC79 0952:04   KEV/CH          0.500
                                         OFFSET          0.546

                      NORMALIZATION CONSTANTS   GAMMA
FWHM                 5   A =    2.000           SLOPE        0.500 E-3
SENSITIVITY         16   B =   10.000           OFFSET       4.500
LIBRARY NUMBER       1   ENERGY TOLERANCE    1.25
HALF-LIFE RATIO      8   ABUNDANCE LIMIT (%)  80.00
```

994	70	63	73	84	73	80	70
1001	73	74	78	90	71	96	72
1008	74	72	69	59	82	66	70
1015	71	79	63	83	79	92	85
1022	105	98	96	95	74	73	78
1029	60	61	61	70	68	59	57
1036	59	60	48	57	81	55	76
1043	61	61	59	55	74	75	72

```
PERCENT COPPER                          .0166
    % RSD COUNTING        21.9
```

1101	77	67	69	79	73	74	79
1108	70	87	86	70	68	84	101
1115	103	79	142	172	197	210	182
1122	129	148	279	676	1964	5073	10025
1129	13289	12567	7941	3402	902	179	49
1136	20	15	24	23	18	12	26
1143	15	21	19	17	24	18	16
1150	13	11	14	22	10	21	21

```
PERCENT ANTIMONY                        .5405
    % RSD COUNTING          .4
```

1288	10	10	15	20	49	54	53
1295	43	19	18	8	8	6	4
1302	7	15	9	10	5	11	6
1309	13	9	9	12	13	18	24
1316	31	12	12	14	12	11	13
1323	8	10	12	13	9	5	8
1330	6	12	12	10	15	12	14
1337	8	13	6	15	8	12	10

```
PERCENT ARSENIC                         .0085
    % RSD COUNTING        22.4
CENTROID CHANNEL  COPPER      1022    HALF-LIFE CU-64     768 MIN.
                  ANTIMONY    1129              SB-122   4043 MIN.
                  ARSENIC     1316              AS-76    1584 MIN.
COUNTS/MICROGRAM  COPPER    318.75    BACKGROUND SPACING:
                  ANTIMONY  206.43       COPPER    25
                  ARSENIC    41.10       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
  E=2.7183                            BACKGROUND CHANNELS 10
  LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1152:33

91119065 RF            PB                        Q325A-3

SAMPLE TIME           26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME      29DEC79 0242:55   TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1       0.250
ELAPSED TIME     609 SEC                VOLUME     UG         8417.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04    KEV/CH        0.500
                                        OFFSET        0.546

                        NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =     2.000            SLOPE       0.500 E-3
SENSITIVITY       16    B =    10.000            OFFSET      4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    995      59      65      67      65      59      62      68
   1002      75      64      60      63      59      74      74
   1009      78      71      52      57      53      77      69
   1016      67      67      73      70      84      76      87
   1023      93     126     104      79      72      64      66
   1030      66      72      48      66      60      67      40
   1037      65      72      59      53      61      40      58
   1044      49      46      50      51      55      46      52
PERCENT COPPER                        .0301
   % RSD COUNTING      13.0
   1101      66      57      69      75      81      75      55
   1108      75      79      70      68      71      77      73
   1115      78     103     105     136     178     185     149
   1122     131     176     278     592    1881    4673    8926
   1129   12163   11503    7281    3068     953     179      47
   1136      20      27      21      16      16      16      19
   1143      20      12      20      18      14      13      10
   1150      15      15      13      11      19      15      18
PERCENT ANTIMONY                      .5497
   % RSD COUNTING       .4
   1288       6      10      19      36      43      51      39
   1295      33      23      10      12      14      11      13
   1302       7       4      15      10       6      10      10
   1309       8       5       9       5       9      11      28
   1316      22      18      19       8      15       8      11
   1323       8      15      10       5       5      13      12
   1330      10      12       9       6      11       5      10
   1337      10      11       9       7       5      12      12
PERCENT ARSENIC                       .0071
   % RSD COUNTING      29.7
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129             SB-122  4043 MIN.
                 ARSENIC     1316             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER    318.75   BACKGROUND SPACING:
                 ANTIMONY  206.43      COPPER    25
                 ARSENIC    41.10      ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1 31DEC79 1154:27

91119065 RF   PB   Q325B-1

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0253:17   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   8939.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                          OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

     995   61   69   81   77   64   77   55
    1002   68   56   62   66   60   64   61
    1009   64   51   65   55   69   53   82
    1016   73   59   69   87   90   120   97
    1023   110   121   94   96   66   70   60
    1030   62   60   46   75   60   54   54
    1037   63   57   58   52   74   59   50
    1044   64   57   61   59   55   60   60
PERCENT COPPER   .0304
   % RSD COUNTING   13.0
    1101   67   48   86   66   72   74   70
    1108   73   77   81   82   59   78   86
    1115   79   74   87   109   130   124   126
    1122   134   155   242   604   1886   4724   9245
    1129   12826   12096   7630   3281   913   192   48
    1136   21   23   15   16   14   11   23
    1143   20   10   21   12   10   15   15
    1150   18   14   13   21   16   12   18
PERCENT ANTIMONY   .5417
   % RSD COUNTING   .4
    1287   12   8   20   16   27   46   61
    1294   53   31   13   10   6   5   10
    1301   10   9   10   8   10   6   11
    1308   11   6   6   5   8   6   13
    1315   10   19   16   12   5   14   6
    1322   11   7   10   10   5   9   12
    1329   8   7   5   5   8   16   7
    1336   12   4   11   15   15   12   14
PERCENT ARSENIC   .0035
   % RSD COUNTING   50.4
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1156:21

91119065 RF   PB   Q325B-2

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0303:40   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   610 SEC   VOLUME   UG   9707.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                  NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

    994   85   84   80   72   73   66   78
   1001   78   54   58   73   82   85   72
   1008   69   81   68   67   58   78   81
   1015   71   53   79   95   105   125   87
   1022   108   130   126   122   89   80   65
   1029   66   63   67   74   70   68   71
   1036   70   62   70   65   86   61   59
   1043   61   69   84   69   47   68   69
PERCENT COPPER   .0326
   % RSD COUNTING   11.8
   1101   90   70   82   90   70   69   67
   1108   65   71   86   73   83   75   115
   1115   102   102   106   130   145   129   127
   1122   168   161   278   692   2072   5279   10358
   1129   14201   13327   8454   3559   984   192   45
   1136   20   26   24   15   14   28   22
   1143   9   13   14   16   8   16   21
   1150   14   15   16   9   16   9   21
PERCENT ANTIMONY   .5536
   % RSD COUNTING   .4
   1286   10   10   15   17   18   27   47
   1293   47   52   41   16   13   12   7
   1300   13   14   16   6   10   11   11
   1307   8   3   5   8   13   6   6
   1314   11   11   23   18   12   5   7
   1321   12   13   12   10   11   10   7
   1328   8   8   14   10   10   11   10
   1335   10   6   12   6   16   17   10
PERCENT ARSENIC   .0015
   % RSD COUNTING   116.7
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1314   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

91119065 RF   PB   0325B-3

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME	29DEC79 0314:04	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	610 SEC	VOLUME	UG	9830.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B = 10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

994	69	83	83	91	90	69	77
1001	88	80	65	71	63	72	77
1008	84	82	81	74	73	83	72
1015	63	64	70	83	96	96	115
1022	129	133	154	111	96	96	75
1029	73	60	65	70	82	59	72
1036	74	91	61	54	45	63	49
1043	81	60	61	57	73	57	82

PERCENT COPPER   .0333
% RSD COUNTING   11.8

1101	89	80	80	63	73	83	69
1108	80	76	78	93	79	88	78
1115	70	86	114	117	146	146	140
1122	146	193	321	705	2100	5293	10313
1129	14050	13021	8087	3475	971	184	36
1136	33	32	25	23	28	19	20
1143	19	27	19	17	14	19	20
1150	20	15	15	15	15	21	18

PERCENT ANTIMONY   .5389
% RSD COUNTING   .4

1288	15	17	23	42	46	58	58
1295	36	23	11	13	12	20	9
1302	9	12	8	6	12	11	2
1309	12	7	8	8	11	16	12
1316	14	5	12	14	7	8	11
1323	11	9	10	8	11	13	- 3
1330	7	10	15	6	10	15	11
1337	11	13	9	14	14	7	10

PERCENT ARSENIC   .0028
% RSD COUNTING   57.7

CENTROID CHANNEL	COPPER	1022	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS	10
LN2=.69315				

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1200:08

91119065 RF   PB   Q325C-1

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0324:28   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   8842.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                        NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

996	72	70	65	62	79	60	69
1003	71	69	71	61	65	47	57
1010	72	65	55	63	47	59	66
1017	83	57	65	65	89	96	97
1024	97	108	91	66	56	58	56
1031	50	57	64	65	60	56	53
1038	54	59	57	57	51	43	48
1045	53	56	52	69	59	49	63

PERCENT COPPER   .0245
   % RSD COUNTING   16.1

1101	54	73	62	58	76	73	60
1108	71	80	76	75	66	55	71
1115	89	88	105	132	165	153	144
1122	122	161	266	644	1790	4656	8754
1129	12051	11747	7306	3125	922	173	40
1136	35	20	20	21	17	18	16
1143	14	17	10	17	14	14	15
1150	21	15	14	13	8	13	13

PERCENT ANTIMONY   .5266
   % RSD COUNTING   .4

1288	11	12	17	26	44	35	52
1295	34	20	9	10	7	5	10
1302	14	9	6	5	11	5	12
1309	7	12	6	10	13	12	14
1316	17	20	8	11	14	4	5
1323	10	7	6	12	7	6	15
1330	12	17	11	7	8	8	7
1337	11	6	11	12	6	16	11

PERCENT ARSENIC   .0062
   % RSD COUNTING   29.6

CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1202:02

91119065 RF              PB                          Q325C-2

SAMPLE TIME             26DEC79 1027:00    LOCATION    AFFRI
ACQUISITION TIME        29DEC79 0334:51    TYPE        COR 5M
PRESET TIME      600 SEC                   GEOMETRY    SHELF 1        0.250
ELAPSED TIME     608 SEC                   VOLUME      UG          7875.000
LIVE TIME        600 SEC                   DETECTOR    GELI 15

CALIBRATION DATE        28DEC79 0952:04    KEV/CH         0.500
                                           OFFSET         0.546

                   NORMALIZATION CONSTANTS      GAMMA
FWHM               5    A =    2.000            SLOPE          0.500 E-3
SENSITIVITY       16    B =   10.000            OFFSET         4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    994      55      56      58      53      52      52      61
   1001      56      54      58      62      46      66      55
   1008      59      53      45      41      49      55      57
   1015      60      51      59      57      60      62      73
   1022      69      81      80      70      55      58      49
   1029      47      54      46      39      41      54      48
   1036      63      50      43      32      49      36      31
   1043      54      44      60      43      51      56      38
PERCENT  COPPER                       .0179
   % RSD COUNTING      22.2
   1101      53      55      49      51      54      51      50
   1108      55      65      70      65      60      68      63
   1115      79      71      86     106     116     139     128
   1122     120     130     212     525    1454    3764    7433
   1129   10352    9680    6158    2709     756     169      31
   1136      22      25      17      15      10      10       5
   1143       7      20      15      14      18      16       4
   1150      14      17      18       9       8      13       7
PERCENT  ANTIMONY                     .4980
   % RSD COUNTING       .4
   1287       6      14      12      12      22      39      43
   1294      42      24      12      12       7       6       8
   1301      10      11      12      12       8       7       8
   1308       6       7       7       6      11       5      10
   1315      21      11       8      11       9       8       8
   1322       4       5       6      11       8       8       8
   1329       4       6       6       5      15       8      12
   1336       7       5      10       5      11      13       9
PERCENT  ARSENIC                      .0029
   % RSD COUNTING      66.7
CENTROID CHANNEL COPPER       1022   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1129             SB-122   4043 MIN.
                 ARSENIC      1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      318.75  BACKGROUND SPACING:
                 ANTIMONY    206.43     COPPER    25
                 ARSENIC      41.10     ANTIMONY  25
CONSTANTS:                             ARSENIC   10
  E=2.7183                          BACKGROUND CHANNELS 10
  LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1203:56

91119065 RF   PB   Q325C-3

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0345:12   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   9044.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                         NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   995   90   68   68   69   64   62   67
  1002   75   68   62   58   78   59   50
  1009   56   74   69   67   73   63   55
  1016   . 61   49   77   67   83   90   85
  1023   107   81   74   88   71   69   68
  1030   55   51   66   59   65   69   65
  1037   62   76   46   70   58   55   60
  1044   70   55   63   44   42   58   68
PERCENT COPPER   .0219
   % RSD COUNTING   17.4
  1101   74   63   62   70   67   60   68
  1108   65   58   64   71   55   75   69
  1115   82   82   119   127   176   150   130
  1122   142   140   262   670   1772   4627   8705
  1129   12096   11457   7465   3114   941   187   41
  1136   27   22   16   23   17   12   21
  1143   14   20   11   14   17   21   12
  1150   8   15   17   15   15   12   12
PERCENT ANTIMONY   .5147
   % RSD COUNTING   .4
  1288   13   12   14   31   40   42   52
  1295   37   17   19   7   4   15   10
  1302   14   8   9   12   6   7   9
  1309   4   10   12   4   10   8   12
  1316   22   13   9   12   11   8   10
  1323   8   10   4   7   11   6   8
  1330   12   7   5   12   16   14   9
  1337   11   11   13   11   4   13   12
PERCENT ARSENIC   .0043
   % RSD COUNTING   40.7
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75 BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1205:50

91119065 RF   PB   0325D-1

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0355:35   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   9175.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   994   79   59   68   56   73   58   64
  1001   71   85   74   60   69   52   74
  1008   56   63   61   59   60   63   60
  1015   71   57   72   68   73   69   91
  1022   85   97   96   80   68   58   68
  1029   67   65   50   54   51   59   66
  1036   58   81   48   60   59   52   58
  1043   67   54   59   67   63   64   57
PERCENT COPPER   .0183
   % RSD COUNTING   20.7
  1101   76   58   77   60   68   63   59
  1108   67   79   59   82   69   63   74
  1115   73   80   98   140   173   178   127
  1122   132   132   235   584   1807   4522   8542
  1129 12072   11357   7308   3191   879   189   29
  1136   18   23   16   13   20   9   10
  1143   20   18   19   7   16   18   20
  1150   12   17   13   16   11   14   11
PERCENT ANTIMONY   .5037
   % RSD COUNTING   .4
  1288   8   14   13   27   39   52   44
  1295   20   15   8   10   12   11   15
  1302   8   9   14   7   7   6   6
  1309   12   11   5   7   9   7   22
  1316   13   17   13   11   5   14   5
  1323   8   9   8   2   7   8   5
  1330   9   6   5   11   7   11   6
  1337   8   5   10   9   5   16   11
PERCENT ARSENIC   .0059
   % RSD COUNTING   29.8
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                  ANTIMONY   1129   SB-122   4043 MIN.
                  ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                  ANTIMONY   206.43   COPPER   25
                  ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1207:44

91119065 RF   PB   Q325D-2

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0405:57   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   608 SEC   VOLUME   UG   8570.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

  995   53   61   49   54   62   50   62
 1002   57   63   57   51   61   64   55
 1009   68   56   64   50   66   60   63
 1016   55   54   52   56   91   72   87
 1023   82   78   79   62   54   55   51
 1030   61   54   57   59   43   46   51
 1037   58   51   45   46   55   54   42
 1044   45   58   55   48   36   51   50
PERCENT COPPER   .0244
   % RSD COUNTING   15.9
 1101   62   56   54   57   66   66   51
 1108   59   60   50   62   60   57   68
 1115   66   69   96   126   162   151   122
 1122   114   148   236   530   1513   4025   7849
 1129   10852   10448   6556   2896   804   159   39
 1136   19   23   16   20   21   10   13
 1143   16   24   12   15   11   11   10
 1150   19   9   8   10   14   17   17
PERCENT ANTIMONY   .4885
   % RSD COUNTING   .4
 1288   6   4   15   17   40   44   49
 1295   35   9   7   5   4   8   9
 1302   7   6   5   11   7   6   7
 1309   9   8   3   10   5   2   11
 1316   21   12   12   12   7   4   5
 1323   6   9   6   6   6   6   8
 1330   9   11   7   6   14   7   7
 1337   9   10   14   10   5   9   2
PERCENT ARSENIC   .0042
   % RSD COUNTING   41.5
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1209:37

91119065 RF              PB                    Q325D-3

SAMPLE TIME          26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME     29DEC79 0416:18   TYPE       COR 5M
PRESET TIME      600 SEC               GEOMETRY   SHELF 1      0.250
ELAPSED TIME     607 SEC               VOLUME     UG       7737.000
LIVE TIME        600 SEC               DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04   KEV/CH        0.500
                                       OFFSET        0.546

                    NORMALIZATION CONSTANTS   GAMMA
FWHM               5   A =    2.000        SLOPE       0.500 E-3
SENSITIVITY       16   B =   10.000        OFFSET      4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%) 80.00

    994    42     53     51     61     51     64     53
   1001    56     44     70     62     44     48     49
   1008    44     38     46     51     51     48     45
   1015    33     45     47     54     62     61     63
   1022    70     71     75     58     45     48     50
   1029    51     46     53     39     46     43     60
   1036    30     50     55     43     57     54     46
   1043    52     46     39     62     46     50     42
PERCENT  COPPER               .0139
   % RSD COUNTING    29.6
   1101    48     71     69     49     52     60     68
   1108    49     63     53     56     55     55     57
   1115    67     82    110    105    110    136     99
   1122   108    106    234    456   1332   3405   7221
   1129  9872   9358   6128   2522    723    163     28
   1136    26     17     19     11     12     14     16
   1143    15     11     17     14      9     11      9
   1150     9      9     11     18     10     13     10
PERCENT  ANTIMONY             .4890
   % RSD COUNTING     .5
   1287     2     11     12     22     16     28     46
   1294    26     23     15      7      8      7     12
   1301     3     10      7      8     10      7     14
   1308    11      5      5      2     22      8     12
   1315    10     11      6     16     12     11     13
   1322     6      8     10      3     10      6      8
   1329     9      6      9      3      7      5      9
   1336     8     10      6      9      4      8      7
PERCENT  ARSENIC              .0047
   % RSD COUNTING    44.4
CENTROID CHANNEL COPPER      1022   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129             SB-122  4043 MIN.
                 ARSENIC     1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER     318.75  BACKGROUND SPACING:
                 ANTIMONY   206.43     COPPER    25
                 ARSENIC     41.10     ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1211:31

91119065 RF   PB   Q325E-1

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME	29DEC79 0426:39	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	608 SEC	VOLUME	UG	8429.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                            OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA   \

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

994	60	67	70	61	51	64	54
1001	66	65	56	64	66	65	65
1008	65	62	57	55	56	67	58
1015	65	62	52	69	88	78	94
1022	111	132	105	83	66	66	61
1029	58	57	62	49	61	51	70
1036	72	61	56	48	48	42	61
1043	56	41	54	51	57	61	53

PERCENT COPPER   .0371
   % RSD COUNTING   11.9

1101	65	52	60	53	53	65	60
1108	59	66	73	65	70	68	64
1115	85	69	100	125	145	157	125
1122	122	158	244	575	1569	4038	8157
1129	11267	11097	7052	3138	841	192	40
1136	18	19	24	17	15	20	15
1143	11	9	10	10	12	13	13
1150	16	12	13	13	12	13	8

PERCENT ANTIMONY   .5234
   % RSD COUNTING   .4

1286	10	10	6	12	19	17	38
1293	54	44	29	16	3	10	9
1300	13	6	6	9	5	8	7
1307	13	9	7	6	10	10	11
1314	18	13	14	19	9	11	4
1321	12	7	11	7	10	8	7
1328	3	8	6	4	12	9	11
1335	6	10	12	8	19	14	15

PERCENT ARSENIC   .0066
   % RSD COUNTING   30.2

CENTROID CHANNEL COPPER	1022	HALF-LIFE CU-64	768 MIN.	
ANTIMONY	1129	SB-122	4043 MIN.	
ARSENIC	1314	AS-76	1584 MIN.	
COUNTS/MICROGRAM COPPER	318.75	BACKGROUND SPACING:		
ANTIMONY	206.43	COPPER	25	
ARSENIC	41.10	ANTIMONY	25	
CONSTANTS:		ARSENIC	10	
E=2.7183		BACKGROUND CHANNELS 10		
LN2=.69315				

EXPERIMENT 1   31DEC79 1213:25

91119065 RF   PB   Q325E-2

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0437:01   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   607 SEC   VOLUME   UG   7580.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

994	48	61	56	56	57	59	51
1001	56	58	60	57	57	67	52
1008	61	43	61	44	62	41	45
1015	56	55	43	54	61	64	99
1022	96	116	101	89	60	65	61
1029	65	68	51	36	49	45	48
1036	56	43	46	54	47	54	63
1043	55	39	59	53	50	58	49

PERCENT COPPER   .0352
    % RSD COUNTING   13.5

1101	44	58	57	51	52	58	70
1108	58	64	61	46	44	60	62
1115	68	81	78	112	122	137	94
1122	105	129	207	469	1358	3628	7270
1129	10271	9696	6310	2699	773	182	45
1136	25	18	14	13	13	10	12
1143	9	17	11	15	16	9	10
1150	13	15	8	8	10	11	12

PERCENT ANTIMONY   .5189
    % RSD COUNTING   .4

1287	12	8	9	10	25	32	44
1294	38	27	17	12	8	6	6
1301	7	4	7	8	8	9	5
1308	9	6	9	9	8	6	7
1315	19	11	7	15	8	11	11
1322	6	12	9	6	10	5	11
1329	8	7	5	10	1	8	4
1336	7	6	12	7	9	9	3

PERCENT ARSENIC   .0032
    % RSD COUNTING   63.9

CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1215:19

91119065 RF              PB                    Q325E-3

SAMPLE TIME              26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME         29DEC79 0447:22   TYPE       COR 5M
PRESET TIME       600 SEC                  GEOMETRY   SHELF 1        0.250
ELAPSED TIME      609 SEC                  VOLUME     UG         8751.000
LIVE TIME         600 SEC                  DETECTOR   GELI 15

CALIBRATION DATE         28DEC79 0952:04   KEV/CH        0.500
                                           OFFSET        0.546

                    NORMALIZATION CONSTANTS     GAMMA
FWHM              5    A =     2.000         SLOPE        0.500 E-3
SENSITIVITY     16    B =    10.000         OFFSET       4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

   995       63       63       56       62       58       62       55
  1002       46       77       68       48       60       52       50
  1009       61       77       64       66       57       55       66
  1016       60       53       58       80       74      121      126
  1023      118      119      106       83       73       72       64
  1030       53       65       49       47       57       57       68
  1037       55       69       56       64       61       59       45
  1044       55       57       76       37       65       62       46
PERCENT COPPER                            .0439
   % RSD COUNTING      10.1
  1101       81       75       69       61       84       58       52
  1108       65       71       69       69       84       69       77
  1115       91       87      114      144      167      125      137
  1122      148      153      260      583     1733     4483     8810
  1129    12210    11697     7457     3277      919      197       40
  1136       23       24       28       13       15       20       12
  1143       19       18       21       22       16       19       14
  1150        3       14       14        9       12       16       15
PERCENT ANTIMONY                          .5422
   % RSD COUNTING       .4
  1286       10        9       14       14       11       23       33
  1293       51       53       26       14       11       10       10
  1300       16       18        8       15       11       13        7
  1307        9        8        4        4       10       10       15
  1314       13       20       20       16        6        7       12
  1321       10        5       15        8        7        7        6
  1328        8        8        9        5        7        9        7
  1335       10       11       10       14       10        9       14
PERCENT ARSENIC                           .0058
   % RSD COUNTING      35.5
CENTROID CHANNEL COPPER       1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1129             SB-122   4043 MIN.
                 ARSENIC      1314             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      318.75  BACKGROUND SPACING:
                 ANTIMONY    206.43     COPPER    25
                 ARSENIC      41.10     ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1217:13

91119065 RF          PB                      Q325F-1

SAMPLE TIME          26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME     29DEC79 0457:44   TYPE       COR 5M
PRESET TIME      600 SEC               GEOMETRY   SHELF 1        0.250
ELAPSED TIME     608 SEC               VOLUME     UG          7724.000
LIVE TIME        600 SEC               DETECTOR   GELI 15


CALIBRATION DATE     28DEC79 0952:04   KEV/CH          0.500
                                       OFFSET          0.546


                     NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =     2.000            SLOPE       0.500 E-3
SENSITIVITY     16   B =    10.000            OFFSET      4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

    995      58        62        55        62        58        73        40
   1002      59        55        62        55        58        54        65
   1009      60        51        54        67        54        61        50
   1016      47        62        51        61        71        92        86
   1023      67        71        78        67        61        50        48
   1030      40        50        49        40        50        59        57
   1037      50        48        48        49        55        53        44
   1044      51        47        61        63        48        61        59
PERCENT COPPER                           .0165
   % RSD COUNTING       27.9
   1101      58        49        52        74        64        61        66
   1108      47        58        74        67        67        55        78
   1115      68        61        97       105       141       147       120
   1122     112       134       180       577      1547      4069      7750
   1129   10678     10131      6361      2820       790       154        39
   1136      25        12        19        15        16        17        22
   1143      11         8         9        10        17        16        12
   1150      13        15        16         7        10        10         6
PERCENT ANTIMONY                         .5373
   % RSD COUNTING        .4
   1287       6        10        12        16        30        45        36
   1294      50        47        16        16         7         6         7
   1301      12         7        13         8         8        13         8
   1308       9         6         4         9        13         9        13
   1315      21        17        13        12         7        11         7
   1322       7         7         3         4        10         8         6
   1329       7         5         8        12         8        12         5
   1336       6        11        13        16         9         9         6
PERCENT ARSENIC                          .0073
   % RSD COUNTING       30.7
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129             SB-122  4043 MIN.
                 ARSENIC       1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      318.75   BACKGROUND SPACING:
                 ANTIMONY    206.43      COPPER    25
                 ARSENIC      41.10      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
  E=2.7183                           BACKGROUND CHANNELS 10
  LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1219:07

91119065 RF   PB   Q325F-2

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0508:05   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   9304.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

   994   75   62   62   65   68   78   76
  1001   69   48   67   65   50   68   67
  1008   63   64   63   63   63   83   63
  1015   75   68   71   72   73   89   81
  1022   87   93   97   86   72   82   68
  1029   53   66   56   71   55   49   61
  1036   72   61   56   62   54   84   60
  1043   58   59   58   73   58   54   64
PERCENT COPPER   .0196
   % RSD COUNTING   20.7
  1101   63   69   70   64   80   63   70
  1108   79   84   .   73   70   77   72   80
  1115   82   91   114   149   161   153   144
  1122   142   157   273   644   1895   4992   9475
  1129   12997   11981   7381   3108   869   168   47
  1136   25   24   18   21   15   15   16
  1143   18   16   21   18   21   19   12
  1150   23   16   15   12   12   14   14
PERCENT ANTIMONY   .5342
   % RSD COUNTING   .4
  1286   12   9   5   15   17   31   53
  1293   52   50   32   25   16   14   9
  1300   9   9   13   9   7   7   10
  1307   11   8   12   6   11   6   11
  1314   11   18   17   15   8   7   9
  1321   7   11   8   8   5   12   11
  1328   10   11   7   10   7   12   7
  1335   10   12   10   12   17   17   12
PERCENT ARSENIC   .0039
   % RSD COUNTING   47.4
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1314   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
  E=2.7183   BACKGROUND CHANNELS 10
  LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1221:00

91119065 RF   PB   Q325F-3

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0518:28   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   609 SEC   VOLUME   UG   8138.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                            OFFSET   0.546

                         NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

     995   66   52   71   69   60   53   62
    1002   57   65   59   69   63   63   73
    1009   58   51   69   52   65   68   61
    1016   69   65   71   62   93   72   98
    1023   80   99   82   85   66   56   76
    1030   47   56   55   50   56   56   68
    1037   64   54   48   49   52   52   55
    1044   61   56   49   50   81   55   57
PERCENT COPPER   .0276
   % RSD COUNTING   16.7
    1101   60   61   63   60   55   48   55
    1108   76   71   74   69   56   69   76
    1115   68   89   97   120   140   151   120
    1122   122   118   249   621   1727   4405   8560
    1129   11699   10709   6771   2934   768   194   48
    1136   23   24   16   18   10   21   21
    1143   12   10   9   14   17   16   14
    1150   18   17   12   10   18   12   13
PERCENT ANTIMONY   .5527
   % RSD COUNTING   .4
    1288   10   14   16   22   35   49   62
    1295   25   15   13   8   8   13   5
    1302   4   15   8   10   2   7   5
    1309   11   10   6   7   7   9   16
    1316   15   17   13   12   8   13   10
    1323   9   9   4   6   8   7   10
    1330   14   3   5   12   11   8   6
    1337   8   14   13   10   13   9   7
PERCENT ARSENIC   .0074
   % RSD COUNTING   27.1
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75   BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1222:54

91119065 RF   PB   Q325G-1

```
SAMPLE TIME          26DEC79 1027:00    LOCATION   AFFRI
ACQUISITION TIME     29DEC79 0528:50    TYPE       COR 5M
PRESET TIME      600 SEC                GEOMETRY   SHELF 1      0.250
ELAPSED TIME     609 SEC                VOLUME     UG        8892.000
LIVE TIME        600 SEC                DETECTOR   GELI 15

CALIBRATION DATE     28DEC79 0952:04    KEV/CH        0.500
                                        OFFSET        0.546
```

```
                     NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =     2.000          SLOPE        0.500 E-3
SENSITIVITY     16   B =    10.000          OFFSET       4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00
```

```
   995      56      52      63      64      54      53      66
  1002      57      50      64      72      58      46      63
  1009      56      69      71      61      60      61      69
  1016      73      54      57      65      70      82      91
  1023      80      86      72      80      55      74      59
  1030      64      54      54      65      50      51      48
  1037      62      55      63      51      57      60      52
  1044      60      64      48      68      49      55      40
```
PERCENT COPPER   .0238
```
   % RSD COUNTING    17.1
  1101      56      67      48      59      74      86      74
  1108      83      57      74      62      72      68      73
  1115      73      92      99     102     176     168     119
  1122     120     136     253     570    1791    4620    8853
  1129   12100   11067    7011    3042     823     174      41
  1136      14      24      19      20      15      17      12
  1143      14      16      15      12      15      15      16
  1150      15      16      13      15      15      14       5
```
PERCENT ANTIMONY   .5246
```
   % RSD COUNTING     .4
  1286       9      10       6      14      16      26      37
  1293      54      43      41      17       8       9       3
  1300      16       6      10       8       8       8      10
  1307       8       8      11       8      21      15       4
  1314      12      17      14      16       7       9       6
  1321      17       5       8       9       7       9       9
  1328       6       9       4       8       9       7       8
  1335       5       5       7       5       9      13      14
```
PERCENT ARSENIC   .0066
```
   % RSD COUNTING    30.0
CENTROID CHANNEL  COPPER      1023   HALF-LIFE CU-64    768 MIN.
                  ANTIMONY    1129             SB-122  4043 MIN.
                  ARSENIC     1314             AS-76   1584 MIN.
COUNTS/MICROGRAM  COPPER    318.75   BACKGROUND SPACING:
                  ANTIMONY  206.43      COPPER    25
                  ARSENIC    41.10      ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1224:48

91119065 RF   PB   Q325G-2

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0539:12	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	608 SEC	VOLUME	UG 7883.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500
		OFFSET	0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

994	51	56	50	54	53	48	62
1001	52	63	37	63	66	52	61
1008	56	59	45	55	44	57	55
1015	50	47	47	43	67	69	73
1022	76	85	74	72	54	64	54
1029	52	57	54	45	57	56	72
1036	64	53	50	62	39	53	56
1043	44	48	41	42	50	64	38

PERCENT COPPER   .0256

% RSD COUNTING   17.4

1101	71	67	49	50	51	60	62
1108	69	72	53	71	49	71	67
1115	66	83	85	116	120	139	130
1122	111	125	213	541	1577	4083	7693
1129	10585	9878	6376	2693	800	177	40
1136	17	19	12	14	11	6	17
1143	11	12	20	13	9	12	13
1150	12	20	16	11	13	18	12

PERCENT ANTIMONY   .5245

% RSD COUNTING   .4

1288	5	13	24	28	37	42	48
1295	34	16	5	3	11	5	6
1302	3	7	8	4	10	6	9
1309	6	8	6	6	9	15	12
1316	13	18	14	8	8	7	11
1323	10	7	12	10	7	7	10
1330	8	10	10	7	12	8	5
1337	4	6	10	8	10	6	8

PERCENT ARSENIC   .0059

% RSD COUNTING   36.4

CENTROID CHANNEL	COPPER	1022	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1226:42

91119065 RF   PB   Q325G-3

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0549:33	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	609 SEC	VOLUME	UG 8969.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

```
                    NORMALIZATION CONSTANTS    GAMMA
FWHM             5   A =    2.000            SLOPE        0.500 E-3
SENSITIVITY     16   B =   10.000            OFFSET       4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE    1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00
```

995	58	67	68	54	56	65	70
1002	56	59	46	65	69	74	75
1009	78	56	57	65	72	56	54
1016	56	65	75	72	85	75	99
1023	106	92	90	76	73	72	72
1030	63	54	57	58	62	62	56
1037	63	61	57	57	55	51	60
1044	63	54	60	59	46	54	57

PERCENT COPPER   .0287
% RSD COUNTING   15.1

1101	74	68	70	72	82	63	72
1108	61	71	91	55	73	84	69
1115	82	94	100	134	158	154	155
1122	123	158	254	621	1824	4681	9176
1129	12549	11839	7444	3147	943	170	35
1136	28	21	12	17	18	19	17
1143	15	18	24	20	13	14	13
1150	17	16	25	20	14	14	18

PERCENT ANTIMONY   .5452
% RSD COUNTING   .4

1288	8	7	15	36	47	55	38
1295	36	22	15	7	11	11	9
1302	11	12	6	13	9	9	13
1309	6	14	5	14	23	9	16
1316	25	22	11	16	6	7	11
1323	4	10	10	8	7	11	5
1330	10	9	12	8	8	9	10
1337	10	10	8	12	5	10	8

PERCENT ARSENIC   .0087
% RSD COUNTING   25.1

```
CENTROID CHANNEL COPPER       1023    HALF-LIFE CU-64    768 MIN.
                 ANTIMONY     1129              SB-122  4043 MIN.
                 ARSENIC      1316              AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER     318.75    BACKGROUND SPACING:
                 ANTIMONY   206.43       COPPER    25
                 ARSENIC     41.10       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   31DEC79 1228:36

91119065 RF   PB   S626A

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0559:56	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	612 SEC	VOLUME	UG 8700.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                    NORMALIZATION CONSTANTS   GAMMA

FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

995	89	80	74	96	97	81	87
1002	91	83	89	105	71	65	106
1009	82	99	78	81	88	93	89
1016	88	87	87	116	135	135	183
1023	186	183	157	133	115	93	77
1030	78	68	73	68	77	75	65
1037	91	91	77	81	76	68	76
1044	73	74	72	71	88	87	67

PERCENT COPPER   .0762
   % RSD COUNTING   7.5

1101	89	87	92	99	100	93	74
1108	93	99	95	103	79	99	87
1115	106	114	129	119	154	145	147
1122	182	178	346	854	2339	6249	11711
1129	16015	14845	9585	4191	1140	253	46
1136	24	25	25	20	28	26	24
1143	24	24	18	20	16	20	21
1150	17	22	13	17	16	22	27

PERCENT ANTIMONY   .7217
   % RSD COUNTING   .3

1287	18	15	12	29	41	52	57
1294	54	35	30	13	15	9	14
1301	11	13	13	6	6	12	6
1308	14	10	17	9	10	14	16
1315	13	17	16	15	9	13	16
1322	11	13	9	13	14	9	14
1329	10	6	11	10	11	15	12
1336	11	8	17	14	12	16	11

PERCENT ARSENIC   .0050
   % RSD COUNTING   43.2

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:	
	ANTIMONY	206.43	COPPER	25
	ARSENIC	41.10	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS	10
LN2=.69315				

EXPERIMENT 1   31DEC79 1230:30

91119065 RF   PB   S626B

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI	
ACQUISITION TIME	29DEC79 0610:21	TYPE	COR 5M	
PRESET TIME	600 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	611 SEC	VOLUME	UG	8532.000
LIVE TIME	600 SEC	DETECTOR	GELI 15	

CALIBRATION DATE	28DEC79 0952:04	KEV/CH	0.500	
		OFFSET	0.546	

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B = 10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	85	92	86	77	88	81	93
1002	79	89	91	99	86	81	69
1009	75	78	86	86	88	74	96
1016	74	87	88	122	139	159	183
1023	167	155	150	128	103	76	84
1030	67	74	69	79	90	64	77
1037	69	76	75	74	61	65	83
1044	70	75	59	80	69	68	61

PERCENT COPPER   .0792
    % RSD COUNTING   7.3

1101	108	89	75	96	92	77	97
1108	96	94	91	94	92	84	92
1115	107	101	129	130	142	139	166
1122	157	214	320	781	2357	6064	11404
1129	15511	14568	9287	3954	1141	236	55
1136	37	33	31	26	17	29	27
1143	17	18	18	23	18	22	22
1150	16	21	16	10	13	18	13

PERCENT ANTIMONY   .7174
    % RSD COUNTING   .4

1288	17	12	18	36	57	68	63
1295	31	26	25	11	13	14	18
1302	11	9	12	10	12	11	11
1309	7	12	13	13	13	16	24
1316	13	18	21	18	13	17	5
1323	11	10	11	16	15	10	10
1330	10	7	15	13	10	9	12
1337	16	12	16	14	15	10	14

PERCENT ARSENIC   .0068
    % RSD COUNTING   35.4

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.	
	ANTIMONY	1129	SB-122	4043 MIN.	
	ARSENIC	1316	AS-76	1584 MIN.	
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43	COPPER	25	
	ARSENIC	41.10	ANTIMONY	25	
CONSTANTS:			ARSENIC	10	
E=2.7183			BACKGROUND CHANNELS 10		
LN2=.69315					

EXPERIMENT 1   31DEC79 1232:24   ,

91119065 RF   PB   S626C

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0620:46   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   610 SEC   VOLUME   UG   7649.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                         OFFSET   0.546

                  NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    995   72   73   86   75   68   68   65
   1002   71   67   78   77   74   64   68
   1009   70   48   68   67   67   66   80
   1016   63   92   89   92   110   133   159
   1023   178   157   128   107   92   73   83
   1030   73   75   65   75   72   71   65
   1037   62   71   62   71   74   61   63
   1044   67   64   67   65   60   80   57
PERCENT COPPER   .0785
   % RSD COUNTING   7.9
   1101   78   81   76   97   76   63   75
   1108   70   92   84   75   64   80   104
   1115   92   92   105   115   133   142   128
   1122   131   162   299   714   2106   5427   10274
   1129   13878   13016   8405   3676   1007   233   62
   1136   27   23   28   26   17   16   15
   1143   18   14   28   19   12   17   20
   1150   28   19   5   16   23   20   9
PERCENT ANTIMONY   .7207
   % RSD COUNTING   .4
   1288   15   16   20   25   44   59   57
   1295   40   26   9   8   12   9   13
   1302   13   9   9   12   6   8   7
   1309   11   8   10   6   13   13   20
   1316   12   15   11   9   7   5   8
   1323   5   11   9   6   12   6   9
   1330   6   13   16   12   10   12   9
   1337   10   12   10   17   14   9   14
PERCENT ARSENIC   .0062
   % RSD COUNTING   37.7
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.   ,
COUNTS/MICROGRAM COPPER   318.75 BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   31DEC79 1234:18

91119065 RF   PB   S604A

SAMPLE TIME	26DEC79 1027:00	LOCATION AFFRI
ACQUISITION TIME	29DEC79 0631:10	TYPE COR 5M
PRESET TIME 600 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 627 SEC		VOLUME UG 8009.000
LIVE TIME 600 SEC		DETECTOR GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                           OFFSET   0.546

```
                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =     2.000           SLOPE        0.500 E-3
SENSITIVITY      16   B =    10.000           OFFSET       4.500
LIBRARY NUMBER    1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)  80.00
```

994	196	220	179	198	173	189	182
1001	188	196	231	186	176	170	207
1008	189	188	189	184	183	185	191
1015	183	181	201	175	209	196	197
1022	199	193	225	192	192	172	196
1029	176	168	172	162	182	172	190
1036	198	175	184	167	179	187	186
1043	198	185	173	159	196	206	171

PERCENT COPPER   .0166
    % RSD COUNTING   49.0

1101	187	172	220	211	185	209	211
1108	208	208	187	230	254	208	251
1115	324	446	716	1204	1452	1383	987
1122	663	562	921	2319	6477	15440	28016
1129	35338	31758	19379	8109	2359	548	192
1136	116	92	111	81	63	73	50
1143	75	57	62	66	67	54	54
1150	61	51	70	59	36	62	44

PERCENT ANTIMONY   1.7545
    % RSD COUNTING   .2

1288	31	53	51	93	145	140	130
1295	83	53	38	36	33	21	25
1302	25	24	33	25	33	25	32
1309	25	31	28	40	68	111	157
1316	147	110	70	44	29	40	23
1323	36	29	36	29	34	20	27
1330	28	39	30	33	38	43	34
1337	29	30	30	32	44	23	29

PERCENT ARSENIC   .0908
    % RSD COUNTING   6.0

```
CENTROID CHANNEL COPPER        1022   HALF-LIFE CU-64      768 MIN.
                 ANTIMONY      1129             SB-122    4043 MIN.
                 ARSENIC       1316             AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER      318.75   BACKGROUND SPACING:
                 ANTIMONY    206.43      COPPER    25
                 ARSENIC      41.10      ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   31DEC79 1236:12

91119065 RF   PB   S604B

SAMPLE TIME   26DEC79 1027:00   LOCATION   AFFRI
ACQUISITION TIME   29DEC79 0641:51   TYPE   COR 5M
PRESET TIME   600 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   637 SEC   VOLUME   UG   10333.000
LIVE TIME   600 SEC   DETECTOR   GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                        OFFSET   0.546

                       NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

    993   277   243   262   269   258   265   299
   1000   278   257   256   268   252   262   226
   1007   246   255   253   258   239   234   245
   1014   276   236   252   255   257   246   262
   1021   268   279   268   255   228   252   250
   1028   242   253   257   233   228   209   234
   1035   240   244   240   250   273   242   237
   1042   225   247   225   225   207   219   251
PERCENT COPPER   .0169
   % RSD COUNTING   43.0
   1101   275   284   284   274   294   288   270
   1108   260   272·   278   293   310   318   328
   1115   445   625   1011   1592   1896   1720   1266
   1122   881   742   1365   3400   9217 21630 37313
   1129 46681 40736 24433 10045   3022   751   287
   1136   208   167   131   138   138   121   102
   1143   117   86   86   91   77   78   88
   1150   84   72   92   78   62   75   68
PERCENT ANTIMONY   1.7907
   % RSD COUNTING   .2
   1287   46   66   61   84   125   192   179
   1294   157   134   70   49   42   46   39
   1301   49   41   40   35   39   38   42
   1308   44   44   50   48   66   107   185
   1315   195   204   153   81   46   47   40
   1322   39   34   30   40   35   40   43
   1329   52   35   43   50   53   52   53
   1336   43   47   45   57   56   51   48
PERCENT ARSENIC   .1033
   % RSD COUNTING   4.8
CENTROID CHANNEL COPPER   1021   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   318.75 BACKGROUND SPACING:
                 ANTIMONY   206.43   COPPER   25
                 ARSENIC   41.10   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   31DEC79 1238:06

91119065 RF   PB   S604C

SAMPLE TIME	26DEC79 1027:00	LOCATION	AFFRI
ACQUISITION TIME	29DEC79 0652:41	TYPE	COR 5M
PRESET TIME	600 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	629 SEC	VOLUME	UG 8036.000
LIVE TIME	600 SEC	DETECTOR	GELI 15

CALIBRATION DATE   28DEC79 0952:04   KEV/CH   0.500
                                       OFFSET   0.546

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

996	203	236	201	212	202	200	201
1003	209	180	224	198	211	205	217
1010	197	191	196	191	214	190	211
1017	210	168	198	190	234	202	202
1024	213	209	196	200	211	204	195
1031	194	181	201	202	179	184	189
1038	175	163	182	191	181	190	182
1045	186	192	187	208	190	172	206

PERCENT COPPER   .0073
    % RSD COUNTING   115.8

1101	221	235	214	189	223	222	245
1108	205	225	222	247	214	248	260
1115	262	452	781	1225	1511	1453	926
1122	675	601	1041	2497	6909	16377	29455
1129	37942	33525	20831	8777	2610	655	201
1136	120	107	108	86	79	87	64
1143	83	87	73	55	74	62	48
1150	59	66	60	53	51	53	54

PERCENT ANTIMONY   1.8679
    % RSD COUNTING   .2

1288	33	40	67	91	149	146	137
1295	96	52	35	51	45	27	31
1302	36	28	38	24	30	29	20
1309	25	24	34	45	80	127	176
1316	160	131	71	48	20	34	34
1323	27	33	43	26	38	25	30
1330	35	39	43	35	37	29	33
1337	23	33	36	38	31	33	28

PERCENT ARSENIC   .1058
    % RSD COUNTING   5.4

CENTROID CHANNEL	COPPER	1024	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1316		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	318.75	BACKGROUND SPACING:		
	ANTIMONY	206.43	COPPER	25	
	ARSENIC	41.10	ANTIMONY	25	

CONSTANTS:/   ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

	UG	%CU	%SB	%AS
91019065 RF				
0325H-1	9291	.04583	.54840	.00176
0325H-2	8308	.04097	.58866	.00167
0325H-3	9724	.04782	.56512	.00421
AVERAGE	9108	.0448	.5674	.0025
%RSD		7.85	3.56	56.36
91119065 RF				
0325I-1	8170	.02424	.48725	.00636
0325I-2	9616	.02462	.52418	.00590
0325I-3	9066	.01983	.48624	.00420
AVERAGE	8951	.0229	.4992	.0054
%RSD		11.62	4.32	20.69
91119065 RF				
0325J-1	8620	.01859	.48239	.00389
0325J-2	9325	.02072	.49884	.00720
0325J-3	8721	.01963	.48459	.00904
AVERAGE	8889	.0196	.4886	.0067
%RSD		5.41	1.82	38.83
91119065 RF				
S626A	7027	.07596	.70529	.00654
S626B	8158	.08079	.75204	.00569
S626C	8522	.07722	.70279	.00256
AVERAGE	7902	.0779	.7200	.0049
%RSD		3.21	3.85	42.42
91119065 RF				
S604A	8437	.00186	1.72263	.09835
S604B	7083	.00676	1.75301	.09957
S604C	6815	.01268	1.63442	.10215
AVERAGE	7445	.0071	1.7033	.1000
%RSD		76.20	3.61	1.93

7

Lab II
911190655Q1

8th Irradiation
1/20/80

	UG	%CU	%SB	%AS
1119065 RF				
Q292A	9480	.00121	.04216	.00054
Q292B	12959	.00115	.04154	.00014
Q292C	13750	.00135	.04327	.00000
AVERAGE	12063	.0012	.0423	.0002
%RSD		8.23	2.07	118.41
RF				
Q303A-1	13197	.00217	.03068	.00007
Q303A-2	11254	.00213	.03396	.00033
Q303A-3	12701	.00226	.03513	.00015
AVERAGE	12384	.0021	.0332	.0001
%RSD		3.03	6.93	68.87
RF				
Q303B-1	9119	.00209	.03342	.00003
Q303B-2	9014	.00216	.03287	.00013
Q303B-3	9229	.00205	.03428	.00063
AVERAGE	9121	.0021	.0335	.0002
%RSD		2.63	2.11	117.60
RF				
Q303C-1	11899	.00206	.10713	.00049
Q303C-2	12855	.00190	.11828	.00032
Q303C-3	10012	.00218	.12001	.00020
AVERAGE	11588	.0020	.1151	.0003
%RSD		6.83	6.07	42.03
RF				
Q303D-1	9264	.00242	.12886	.00113
Q303D-2	12755	.00252	.12935	.00079
Q303D-3	13108	.00262	.13401	.00048
AVERAGE	11709	.0025	.1307	.0008
%RSD		3.95	2.17	40.13
RF				
Q303E-1	13824	.00210	.03087	.00020
Q303E-2	11600	.00221	.03359	.00024
Q303E-3	8545	.00235	.03469	.00020
AVERAGE	11323	.0022	.0330	.0002
%RSD		5.61	5.94	10.34
RF				
Q303F-1	6637	.00259	.11787	.00000
Q303F-2	6888	.00248	.11221	.00011
Q303F-3	9005	.00221	.11893	.00004
AVERAGE	7510	.0024	.1163	.0000
%RSD		8.02	3.10	92.79
RF				
Q303G-1	12463	.00211	.11199	.00047
Q303G-2	11729	.00192	.11884	.00055
Q303G-3	10112	.00229	.11937	.00163
AVERAGE	11434	.0021	.1167	.0008
%RSD		8.74	3.52	72.52
RF				
Q303H-1	11579	.00238	.11687	.00046
Q303H-2	13785	.00196	.11180	.00139
Q303H-3	11008	.00203	.12142	.00067
AVERAGE	12124	.0021	.1167	.0008
%RSD		10.54	4.12	57.38

	UG	%CU	%SB	%AS
RF				
Q303I-1	9714	.00269	.12842	.00033
Q303I-2	8491	.00235	.12983	.00188
Q303I-3	8593	.00251	.13859	.00067
AVERAGE	8933	.0025	.1322	.0009
%RSD		6.73	4.16	83.98
RF				
Q303J-1	12190	.00133	.05191	.00030
Q303J-2	10537	.00156	.05123	.00076
Q303J-3	8097	.00156	.05379	.00113
AVERAGE	10274	.0014	.0523	.0007
%RSD		8.89	2.53	56.19
RF				
Q303K-1	11530	.00215	.03243	.00104
Q303K-2	10293	.00218	.03468	.00046
Q303K-3	9680	.00231	.03575	.00073
AVERAGE	10501	.0022	.0342	.0007
%RSD		3.82	4.94	38.52
RF				
Q303L-1	8548	.00243	.13089	.00046
Q303L-2	8622	.00204	.12668	.00086
Q303L-3	9368	.00266	.13224	.00115
AVERAGE	8846	.0023	.1299	.0008
%RSD		13.13	2.23	41.57
RF				
Q303M-1	8051	.00158	.05596	.00046
Q303M-2	9682	.00146	.05785	.00058
Q303M-3	7985	.00189	.06153	.00007
AVERAGE	8573	.0016	.0584	.0003
%RSD		13.42	4.84	70.16
RF				
Q303N-1	9389	.00284	.11116	.00031
Q303N-2	11548	.00230	.11452	.00026
Q303N-3	8647	.00207	.11995	.00102
AVERAGE	9861	.0024	.1152	.0005
%RSD		16.37	3.84	78.72
RF				
Q303O-1	11964	.00325	.23926	.00052
Q303O-2	8275	.00367	.24806	.00003
Q303O-3	10692	.00372	.26648	.00019
AVERAGE	10310	.0035	.2512	.0002
%RSD		7.25	5.52	97.35
RF				
Q304A-1	10531	.00219	.03265	.00083
Q304A-2	8952	.00199	.03039	.00022
Q304A-3	10547	.00181	.03024	.00032
AVERAGE	10010	.0020	.0311	.0004
%RSD		9.47	4.34	70.10

	UG	%CU	%SB	%AS
RF				
Q304B-1	12928 /	.00233	.03275	.00012
Q304B-2	11674 /	.00234	.03069	.00026
Q304B-3	10393 /	.00197	.02863	.00000
AVERAGE	11665	.0022	.0306	.0001
%RSD		9.48	6.71	95.21
RF				
Q304C-1	11510 /	.00225	.11116	.00046
Q304C-2	10742 /	.00222	.10773	.00070
Q304C-3	9114 /	.00225	.10177	.00000
AVERAGE	10455	.0022	.1068	.0003
%RSD		.76	4.44	89.67
RF				
Q304D-1	10786 /	.00200	.11117	.00101
Q304D-2	11201 /	.00189	.11152	.00063
Q304D-3	11569 /	.00255	.10622	.00050
AVERAGE	11185	.0021	.1096	.0007
%RSD		16.39	2.70	36.63
RF				
Q304E-1	10370 /	.00184	.02071	.00001
Q304E-2	11221 /	.00165	.01930	.00022
Q304E-3	9301 /	.00193	.01881	.00063
AVERAGE	10297	.0018	.0196	.0002
%RSD		7.86	5.02	106.29
RF				
Q304F-1	7159 /	.00220	.10582	.00035
Q304F-2	7838 /	.00289	.10973	.00095
Q304F-3	7980 /	.00205	.10572	0.00000
AVERAGE	7659	.0023	.1070	.0004
%RSD		18.74	2.13	110.22
RF				
Q304G-1	11174 /	.00234	.03025	.00087
Q304G-2	12198 /	.00249	.02892	.00056
Q304G-3	10267 /	.00215	.02845	.00010
AVERAGE	11213	.0023	.0292	.0005
%RSD		7.29	3.19	74.50
RF				
Q304H-1	11900 /	.00142	.05285	.00012
Q304H-2	11014 /	.00163	.04992	.00005
Q304H-3	11777 /	.00177	.04598	.00047
AVERAGE	11563	.0016	.0495	.0002
%RSD		10.89	6.95	100.75
RF				
Q304I-1	11390 /	.00188	.02995	.00052
Q304I-2	13032 /	.00227	.02985	.00008
Q304I-3	13454 /	.00197	.02935	.00047
AVERAGE	12625	.0020	.0297	.0003
%RSD		9.96	1.08	65.70

	UG	%CU	%SB	%AS
RF				
Q304J-1	10643	.00148	.05930	.00017
Q304J-2	10687	.00128	.05525	.00013
Q304J-3	8104	.00149	.05311	.00058
AVERAGE	9811	.0014	.0558	.0003
%RSD		8.30	5.62	82.10
RF				
Q304K-1	13314	.00282	.13303	.00072
Q304K-2	12019	.00242	.13822	.00091
Q304K-3	12209	.00280	.13430	.00097
AVERAGE	12514	.0026	.1351	.0008
%RSD		8.37	2.00	14.88
RF				
Q304L-1	10221	.00181	.11034	.00136
Q304L-2	10659	.00215	.10892	.00156
Q304L-3	8075	.00173	.10351	.00095
AVERAGE	9652	.0019	.1075	.0012
%RSD		11.69	3.34	23.92
RF				
Q304M-1	15319	.00171	.01569	.00014
Q304M-2	16154	.00177	.01476	.00014
Q304M-3	10657	.00187	.01450	.00035
AVERAGE	14043	.0017	.0149	.0002
%RSD		4.50	4.17	55.11
RF				
Q304N-1	15018	.00232	.11218	.00039
Q304N-2	14732	.00246	.10670	.00046
Q304N-3	15846	.00189	.10353	.00060
AVERAGE	15198	.0022	.1074	.0004
%RSD		13.30	4.07	21.67
RF				
Q304O-1	12915	.00213	.02963	.00030
Q304O-2	9105	.00216	.03077	.00050
Q304O-3	9830	.00226	.02956	.00030
AVERAGE	10616	.0021	.0299	.0003
%RSD		3.10	2.26	30.65
RF				
626-1	9004	.07948	.76761	.00370
626-2	8513	.08000	.71091	.00216
626-3	9583	.07449	.68145	.00182
AVERAGE	9033	.0779	.7199	.0025
%RSD		3.90	6.08	38.98
RF				
604-1	8895	.00541	1.79138	.10706
604-2	8567	.00647	1.82511	.10050
604-3	8064	.00647	1.75727	.09245
AVERAGE	8509	.0061	1.7912	.1000
%RSD		9.98	1.89	7.31

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0027:49

RF   PB   626-1

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 2354:50	TYPE	7. 5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0. 250
ELAPSED TIME	309 SEC	VOLUME	UG 9004. 000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0. 500
                                      OFFSET   0. 543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2. 000	SLOPE	0. 500 E-3
SENSITIVITY	16	B = 10. 000	OFFSET	4. 500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1. 25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80. 00	

974	71	71	72	60	72	66	77
981	72	69	66	61	71	66	66
988	63	59	72	60	73	60	72
995	74	71	71	66	66	59	52
1002	61	74	69	58	59	60	64
1009	57	77	74	58	61	78	77
1016	82	109	184	283	443	632	885
1023	874	843	704	476	306	196	100
1030	80	60	64	61	60	62	58
1037	61	48	62	57	53	55	49
1044	52	50	50	46·	52	44	51
1051	45	64	49	47	61	63	53
1058	62	62	60	65	53	47	45
1065	50	60	47	68	65	46	44

CNTS/MICROGRAM COPPER   261. 94

COPPER IN STANDARD	. 078%
CENTROID CHANNEL	1023
HALF-LIFE CU-64	768 MIN.
BACKGROUND SPACING	25
BACKGROUND CHANNELS	10

CONSTANTS:
    E=2. 7183
    LN2=. 69315

EXPERIMENT 1   3JAN80 0028:58

RF   PB   626-2

SAMPLE TIME		2JAN80 1033:00	LOCATION	AFFRI	
ACQUISITION TIME		3JAN80 0000:12	TYPE	7.5MIN.	
PRESET TIME	300 SEC		GEOMETRY	SHELF 1	0.250
ELAPSED TIME	308 SEC		VOLUME	UG	8513.000
LIVE TIME	300 SEC		DETECTOR	GELI 15	

CALIBRATION DATE	5OCT79 1357:49	KEV/CH	0.500
		OFFSET	0.543

		NORMALIZATION CONSTANTS		GAMMA	
FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

974	62	53	57	51	52	61	62
981	53	51	65	69	59	60	63
988	56	57	60	62	61	63	70
995	58	56	46	59	63	66	59
1002	49	50	65	61	63	53	59
1009	40	50	64	55	67	68	60
1016	96	118	182	293	428	594	830
1023	893	826	596	407	260	138	105
1030	72	69	45	60	39	45	29
1037	44	41	45	43	56	46	33
1044	49	46	45	52	43	51	31
1051	47	52	58	47	62	51	54
1058	46	48	34	43	41	53	37
1065	47	37	51	47	48	46	44

CNTS/MICROGRAM COPPER   263.65

COPPER IN STANDARD	.078%
CENTROID CHANNEL	1023
HALF-LIFE CU-64	768 MIN.
BACKGROUND SPACING	25
BACKGROUND CHANNELS	10

CONSTANTS:
    E=2.7183
  LN2=.69315

EXPERIMENT 1   3JAN80 0030:05

RF   PB   626-3

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	3JAN80 0005:33	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	308 SEC	VOLUME	UG 9583.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                             OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

974	73	60	63	56	66	55	61
981	72	55	49	59	57	69	55
988	60	58	67	49	49	58	58
995	64	67	65	74	80	55	58
1002	69	72	64	68	52	64	65
1009	57	42	65	70	69	70	85
1016	102	137	220	316	470	672	832
1023	884	856	669	431	295	161	93
1030	92	63	47	69	59	64	70
1037	37	44	46	53	54	39	58
1044	56	56	55	44	41	60	52
1051	56	55	51	45	66	43	43
1058	57	42	55	65	49	57	44
1065	48	60	36	46	57	44	41

CNTS/MICROGRAM COPPER   245.50

COPPER IN STANDARD   .078%
CENTROID CHANNEL   1023
HALF-LIFE CU-64   768 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
  LN2=.69315

AVG.   CNTS/UG COPPER   257.03

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0031:02

RF                  PB                        626-1

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2354:50    TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME     309 SEC                  VOLUME     UG        9004.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH        0.500
                                          OFFSET        0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000            SLOPE       0.500 E-3
SENSITIVITY       16    B =   10.000            OFFSET      4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE    1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

  1080        48      53      68      60      62      59      61
  1087        52      47      47      63      39      61      53
  1094        57      64      56      74      56      56      59
  1101        49      49      62      65      73      62      71
  1108        51      63      51      75      71      73      67
  1115        70      84      93     119     152     123     136
  1122       105     135     251     583    1557    3940    7639
  1129     10770   10677    7420    3302    1069     227      54
  1136        30      27      27      17      28      32      17
  1143        17      22      15      15      15      11      22
  1150        17      18      13      14      16      10       9
  1157        15       7      19      20      10       6      16
  1164        21      14      15      16      19      12       7
  1171        10      15      13      21      13      15      12


CNTS/MICROGRAM ANTIMONY           159.54


ANTIMONY IN STANDARD      .72%
CENTROID CHANNEL         1129
HALF-LIFE SB-122         4032 MIN.
BACKGROUND SPACING         25
BACKGROUND CHANNELS        10
CONSTANTS:
    E=2.7183
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0032:10

RF                 PB                        626-2

SAMPLE TIME           2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME      3JAN80 0000:12   TYPE       7.5MIN.
PRESET TIME      300 SEC               GEOMETRY   SHELF 1      0.250
ELAPSED TIME     308 SEC               VOLUME     UG          8513.000
LIVE TIME        300 SEC               DETECTOR   GELI 15


CALIBRATION DATE      5OCT79 1357:49   KEV/CH         0.500
                                       OFFSET         0.543


                    NORMALIZATION CONSTANTS   GAMMA
FWHM              5    A =    2.000            SLOPE      0.500 E-3
SENSITIVITY     16    B =   10.000            OFFSET     4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

   1080       40       54       41       49       44       45       53
   1087       42       52       37       49       40       58       45
   1094       46       56       44       40       46       51       41
   1101       55       38       57       66       63       52       58
   1108       53       54       59       60       57       70       63
   1115       65       72       99      114      141      142      112
   1122      126      123      225      523     1437     3579     6783
   1129     9679     9214     6049     2896      860      214       38
   1136       30       15       22       11       22       12       18
   1143       17       11       18       10       17       13       16
   1150       15        8       11       15        9       15       11
   1157        8       12       16       16        8       11       11
   1164       14       14        7       13        6       13        5
   1171       10        8       12       14       10       14        8


CNTS/MICROGRAM ANTIMONY          147.76



ANTIMONY IN STANDARD     .72%
CENTROID CHANNEL         1129
HALF-LIFE SB-122         4032 MIN.
BACKGROUND SPACING         25
BACKGROUND CHANNELS        10
CONSTANTS:
    E=2.7183
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0033:17

RF   PB   626-3

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   3JAN80 0005:33   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   308 SEC   VOLUME   UG   9583.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

                       NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

    1080   36   54   47   46   41   61   57
    1087   54   44   53   51   49   62   42
    1094   49   49   58   70   60   57   48
    1101   65   48   61   61   48   64   67
    1108   59   69   66   63   70   55   74
    1115   67   73   84   125   129   126   112
    1122   119   148   269   567   1628   4006   7665
    1129   10201   9889   6483   2861   898   219   52
    1136   22   20   16   17   15   15   17
    1143   10   15   9   18   17   15   13
    1150   13   16   8   20   18   19   16
    1157   12   12   13   16   9   14   10
    1164   12   10   12   11   9   14   8
    1171   10   8   15   14   8   14   12

CNTS/MICROGRAM ANTIMONY   141.63

ANTIMONY IN STANDARD   .72%
CENTROID CHANNEL   1129
HALF-LIFE SB-122   4032 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
    LN2=.69315

AVG.   CNTS/UG ANTIMONY   149.65

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0034:14

RF                   PB                        604-1

SAMPLE TIME          2JAN80 1023:00   LOCATION   AFFRI
ACQUISITION TIME     3JAN80 0010:55   TYPE       7.5MIN.
PRESET TIME      300 SEC              GEOMETRY   SHELF 1       0.250
ELAPSED TIME     321 SEC              VOLUME     UG         8895.000
LIVE TIME        300 SEC              DETECTOR   GELI 15

CALIBRATION DATE     5OCT79 1357:49   KEV/CH        0.500
                                      OFFSET        0.543

                      NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2.000     SLOPE        0.500 E-3
SENSITIVITY     16   B =   10.000     OFFSET       4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

  1266       30       34       36       29       42       32       37
  1273       27       32       31       37       39       23       35
  1280       35       28       29       26       28       28       26
  1287       23       24       32       40       53       77       83
  1294       58       61       45       38       34       26       19
  1301       35       22       26       24       23       18       23
  1308       31       22       30       37       88      119      199
  1315      252      254      185       98       53       37       32
  1322       22       19       23       23       30       21       24
  1329       25       30       32       38       44       31       26
  1336       31       25       26       20       28       36       28
  1343       25       31       21       13       29       28       24
  1350       19       26       28       20       26       27       17
  1357       25       19       28       26       31       18       27
```

CNTS/MICROGRAM ARSENIC   33.27

```
ARSENIC IN STANDARD      .10%
CENTROID CHANNEL         1315
HALF-LIFE AS-76          1584 MIN.
BACKGROUND SPACING         10
BACKGROUND CHANNELS        10
CONSTANTS:
    E=2.7183
    LN2=.69315
```

EXPERIMENT 1   3JAN80 0035:21

RF   PB   604-2

SAMPLE TIME	2JAN80 1033:00	LOCATION AFFRI
ACQUISITION TIME	3JAN80 0016:29	TYPE 7.5MIN.
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 320 SEC		VOLUME UG 8567.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

```
                    NORMALIZATION CONSTANTS    GAMMA
FHHM              5    A =    2.000          SLOPE        0.500 E-3
SENSITIVITY      16    B =   10.000          OFFSET       4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)   80.00
```

1266	29	17	29	20	30	33	28
1273	16	33	32	36	44	39	32
1280	40	37	27	33	29	22	25
1287	36	31	40	30	46	85	70
1294	66	39	37	42	43	39	29
1301	25	27	29	26	25	19	27
1308	27	29	23	36	77	126	188
1315	219	223	187	93	62	24	19
1322	32	36	31	23	17	25	20
1329	26	37	36	37	45	33	19
1336	29	26	26	19	21	25	19
1343	19	20	24	14	15	31	28
1350	21	18	24	27	18	13	28
1357	25	27	24	26	24	24	20

CNTS/MICROGRAM ARSENIC   31.24

```
ARSENIC IN STANDARD      .10%
CENTROID CHANNEL         1315
HALF-LIFE AS-76          1584 MIN.
BACKGROUND SPACING         10
BACKGROUND CHANNELS        10
CONSTANTS:
    E=2.7183
    LN2=.69315
```

EXPERIMENT 1   3JAN80 0036:28

RF   PB   604-3

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	3JAN80 0022:03	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	318 SEC	VOLUME	UG 8064.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                            OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

1266	29	24	26	28	17	35	29
1273	23	31	29	33	27	32	30
1280	28	27	23	19	20	29	26
1287	19	26	39	24	61	55	63
1294	70	46	35	22	20	35	15
1301	27	18	29	24	28	17	17
1308	23	23	27	33	49	104	169
1315	194	212	147	87	36	28	29
1322	10	26	23	23	15	22	23
1329	28	23	24	19	34	26	22
1336	28	30	24	24	25	20	24
1343	16	19	21	21	28	18	29
1350	21	21	27	24	17	19	19
1357	19	19	31	16	20	23	19

CNTS/MICROGRAM ARSENIC   28.73

ARSENIC IN STANDARD	.10%
CENTROID CHANNEL	1315
HALF-LIFE AS-76	1584 MIN.
BACKGROUND SPACING	10
BACKGROUND CHANNELS	10

CONSTANTS.
    E=2.7183
    LN2=.69315

AVG. CNTS/UG ARSENIC   31.08

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0037:26

91119065 RF   FB   0292A

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1537:46   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   301 SEC   VOLUME   UG   9480.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

   995   7   3   12   8   10   4   8
  1002   6   5   8   7   6   11   7
  1009   14   9   7   6   2   5   11
  1016   11   11   6   10   16   17   17
  1023   27   26   26   23   9   13   9
  1030   13   10   7   7   5   3   7
  1037   6   11   11   8   8   6   8
  1044   6   9   4   2   7   3   2
PERCENT COPPER   .0012
   % RSD COUNTING   12.1
  1102   4   9   7   3   3   5   6
  1109   6   4   8   7   11   4   4
  1116   10   9   4   12   8   13   9
  1123   9   15   23   53   142   340   528
  1130   734   592   374   158   46   7   5
  1137   4   1   7   1   2   0   1
  1144   0   6   1   6   0   4   2
  1151   3   5   1   4   4   5   2
PERCENT ANTIMONY   .0421
   % RSD COUNTING   1.8
  1287   1   2   4   5   3   1   3
  1294   4   5   3   7   3   4   2
  1301   3   3   5   4   2   3   6
  1308   3   1   0   1   6   3   4
  1315   3   9   4   4   0   3   1
  1322   3   5   2   4   1   5   5
  1329   1   1   3   1   3   5   5
  1336   3   1   2   5   5   4   1
PERCENT ARSENIC   .0005
   % RSD COUNTING   108.0
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7182   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   2JAN80 0039:19

RF   PB   0292B

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 1543:00	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	301 SEC	VOLUME	UG 12959.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                      OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

996	6	6	8	10	5	3	7
1003	6	9	7	7	8	8	6
1010	12	8	3	6	8	7	11
1017	12	14	18	14	21	24	32
1024	40	30	23	23	25	8	11
1031	9	4	9	2	5	0	9
1038	8	13	9	3	9	5	2
1045	9	8	9	11	5	3	6

PERCENT COPPER   .0011
  % RSD COUNTING   10.5

1102	7	9	6	8	7	5	7
1109	15	7	14	13	5	9	13
1116	10	10	10	9	10	11	7
1123	15	18	29	61	190	432	786
1130	539	804	496	214	51	14	1
1137	0	2	4	3	3	3	4
1144	0	5	3	4	6	10	2
1151	7	7	8	3	5	8	1

PERCENT ANTIMONY   .0415
  % RSD COUNTING   1.5

1288	6	3	3	6	5	4	4
1295	5	5	4	4	5	5	4
1302	5	2	4	5	7	10	3
1309	7	3	2	5	1	4	1
1316	4	3	4	6	1	5	3
1323	5	2	3	3	3	4	3
1330	5	3	9	3	4	4	3
1337		5	9	3	2	3	4

PERCENT ARSENIC   -.0001
  % RSD COUNTING   -273.8

CENTROID CHANNEL COPPER	1024	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1136	SB-122	4043 MIN.
ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	257.02	BACKGROUND SPACING:	
ANTIMONY	149.64	COPPER	25
ARSENIC	31.07	ANTIMONY	25
CONSTANTS		ARSENIC	10
E-X FLAG		BACKGROUND CHANNELS 10	
LMR- RATIO			

RF   FB   0292C

SAMPLE TIME	2JAN80 1033:00	LOCATION AFFRI
ACQUISITION TIME	2JAN80 1548:14	TYPE 7.5MIN.
PRESET TIME 500 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 301 SEC		VOLUME UG 13750.000
LIVE TIME 100 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

996	7	6	4	10	10	5	12
1002	9	10	10	7	7	13	12
1010	11	7	8	8	11	10	16
1017	14	11	19	15	29	33	36
1024	46	36	31	18	14	9	11
1031	12	9	10	10	6	6	5
1038	6	7	8	10	13	5	1
1045	8	7	6	5	10	7	6

PERCENT COPPER   .0013
   % RSD COUNTING   9.2

1102	10	12	7	9	8	5	13
1109	13	14	12	10	12	8	8
1116	13	10	12	15	12	14	16
1123	11	18	26	58	206	520	836
1130	1037	904	513	236	66	13	4
1137	3	5	1	4	2	4	3
1144	2	5	8	6	4	4	3
1151	6	3	4	1	3	1	1

PERCENT ANTIMONY   .0432
   % RSD COUNTING   1.5

1286	4	4	4	2	2	3	2
1293	4	2	3	1	6	8	7
1300	5	5	4	2	3	5	5
1307	4	1	3	5	3	6	4
1314	2	2	5	5	3	4	1
1321	4	2	1	7	5	5	1
1328	3	2	5	3	3	1	5
1335	3	4	3	4	4	6	5

PERCENT ARSENIC   -.0000
   % RSD COUNTING   -2456.3

CENTROID CHANNEL COPPER	1024	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1314	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER 25
	ARSENIC	31.07	ANTIMONY 25
CONSTANTS:		ARSENIC 10
E=2.7183		BACKGROUND CHANNELS 10
LN2=.69315		

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   2JAN80 0043:06

RF                      PB                      Q303A-1

SAMPLE TIME             2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME        2JAN80 1553:28   TYPE       7.5MIN.
PRESET TIME      300 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME     301 SEC                 VOLUME     UG      13197.000
LIVE TIME        300 SEC                 DETECTOR   GELI 15


CALIBRATION DATE        5OCT79 1357:49   KEV/CH       0.500
                                         OFFSET       0.543


                     NORMALIZATION CONSTANTS   GAMMA
FWHM              5   A =    2.000             SLOPE      0.500 E-3
SENSITIVITY     16   B =   10.000             OFFSET     4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

    996       6       8       5       6       5       9       5
   1003       3       5       9       3       6       5       7
   1010       8       5       6      12       9       9       6
   1017       6      10      17      21      39      28      52
   1024      58      56      49      39      17      20       8
   1031       7       8       6       6       2       3       6
   1038       5       4       3       2       4       7       6
   1045       4       9       5       8       5       4       7
PERCENT COPPER                        .0021
   % RSD COUNTING      6.8
   1102       8       9       3       3       7      10       6
   1109       9       7       7       9       4       5      12
   1116       8       9       4       7       5       7      10
   1123       7       9      25      41     101     305     556
   1130     765     654     379     138      48      12       4
   1137       3       3       2       4       2       5       1
   1144       6       5       2       1       5       6       3
   1151       5       2       3       2       2       3       1
PERCENT ANTIMONY                      .0306
   % RSD COUNTING      1.8
   1287       5       3       0       1       5       3       6
   1294       4       2       2       3       2       2       3
   1301       2       4       3       7       2       2       4
   1308       1       3       3       4       6       3       2
   1315       5       2       3       5       3       2       5
   1322       3       4       3       8       1       1       4
   1329       1       4       6       2       7       1       3
   1336       2       1       3       6       3       4       5
PERCENT ARSENIC                       .0000
   % RSD COUNTING    473.7
CENTROID CHANNEL COPPER        1024   HALF-LIFE CU-64      768 MIN.
                 ANTIMONY      1130             SB-122    4043 MIN.
                 ARSENIC       1315             AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER      257.02   BACKGROUND SPACING:
                 ANTIMONY    149.64      COPPER    25
                 ARSENIC      31.07      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   2JAN80 0045:00

RF   PB   0303A-2

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1558:42   TYPE   7. 5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0. 250
ELAPSED TIME   301 SEC   VOLUME   UG   11254. 000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0. 500
                                          OFFSET   0. 543

                        NORMALIZATION CONSTANTS   GAMMA
FMHM   5   A =   2. 000   SLOPE   0. 500 E-3
SENSITIVITY   16   B =   10. 000   OFFSET   4. 500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1. 25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80. 00

    996   5   4   7   9   5   4   6
   1003   9   9   10   7   2   8   8
   1010   7   10   14   10   9   9   4
   1017   8   12   21   16   33   46   46
   1024   41   41   39   24   18   12   11
   1031   6   6   6   6   3   5   4
   1038   10   6   9   8   9   6   6
   1045   7   7   6   11   4   2   4
PERCENT   COPPER   . 0021
   % RSD COUNTING   7. 6
   1102   5   5   4   6   5   8   1
   1109   8   5   5   6   8   5   3
   1116   8   9   9   7   13   7   11
   1123   8   15   15   52   135   305   563
   1130   636   584   367   150   42   9   3
   1137   6   2   2   5   2   3   5
   1144   2   4   7   1   1   7   4
   1151   2   7   5   2   3   6   7
PERCENT   ANTIMONY   . 0339
   % RSD COUNTING   1. 9
   1284   3   2   3   3   6   1   6
   1291   3   7   4   1   3   2   0
   1298   5   7   4   6   2   4   2
   1305   4   6   4   5   5   2   2
   1312   2   3   3   5   2   1   3
   1319   4   5   6   4   3   3   6
   1326   1   3   4   3   3   1   3
   1332   2   5   2   6   5   2   3
PERCENT   ARSENIC   -. 0003
   % RSD COUNTING   -132. 4
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                  ANTIMONY   1130   SB-122   4043 MIN.
                  ARSENIC   1312   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257. 02   BACKGROUND SPACING:
                  ANTIMONY   149. 64   COPPER   25
                  ARSENIC   31. 07   ANTIMONY   25
CONSTANTS: ARSENIC   10
   E=2. 7183   BACKGROUND CHANNELS 10
   LN2=. 69215

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0046:53

PF   FB   0303A-3

SAMPLE TIME   ,   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1603:56   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   301 SEC   VOLUME   UG   12701.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                             OFFSET   0.543

                          NORMALIZATION CONSTANTS   GAMMA
FNHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

   996   9   9   11   5   9   7   6
  1003   8   9   7   7   5   11   6
  1010   8   8   6   7   6   7   12
  1017   11   14   28   20   39   47   55
  1024   56   48   47   33   17   15   11
  1031   10   6   10   4   3   12   9
  1038   2   10   7   5   4   8   5
  1045   9   5   10   6   7   4   4
PERCENT COPPER   .0022
   % RSD COUNTING   7.0
  1102   4   6   9   4   5   8   8
  1109   8   9   6   4   8   6   10
  1116   8   9   11   8   5   15   8
  1123   ' 12   14   20   66   136   370   630
  1130   802   687   398   166   56   19   6
  1137   1   3   6   5   1   5   5
  1144   6   5   7   3   5   4   3
  1151   2   3   3   2   3   5   4
PERCENT ANTIMONY'   .0351
   % RSD COUNTING   1.7
  1287   5   0   7   3   3   4   7
  1294   2   5   5   1   3   3   1
  1301   3   5   3   4   1   2   3
  1308   4   2   3   3   3   3   3
  1315   3   0   3   6   3   1   2
  1322   3   4   4   7   3   3   3
  1329   5   3   2   4   2   1   3
  1336   4   2   1   7   3   5   2
PERCENT ARSENIC   -.0001
   % RSD COUNTING   -239.0
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0048:47

RF                      PB                      Q303B-1

SAMPLE TIME             2JAN80 1033:00      LOCATION    AFFRI
ACQUISITION TIME        2JAN80 1609:10      TYPE        7.5MIN.
PRESET TIME     300 SEC                     GEOMETRY    SHELF 1      0.250
ELAPSED TIME    300 SEC                     VOLUME      UG        9119.000
LIVE TIME       300 SEC                     DETECTOR    GELI 15


CALIBRATION DATE        5OCT79 1357:49      KEV/CH         0.500
                                            OFFSET         0.543


                     NORMALIZATION CONSTANTS     GAMMA
FWHM            5     A =     2.000          SLOPE          0.500 E-3
SENSITIVITY    16     B =    10.000          OFFSET         4.500
LIBRARY NUMBER  1     ENERGY TOLERANCE       1.25
HALF-LIFE RATIO 8     ABUNDANCE LIMIT (%)   80.00

    996        5        8        3        4        6        3        5
   1003        4        3        6        5        6        7        5
   1010        7        5        7        4        5        5       11
   1017       10        9        9       14       24       35       31
   1024       41       46       27       19        5       10        9
   1031       10        3        3        6        1        8        5
   1038        7        4        6        1        3        2        7
   1045       10        6        7        5        7        6       10
PERCENT  COPPER                        .0021
    % RSD COUNTING      8.9
   1102        7        8        9        7        1        6        6
   1109        3        6       10        4        5        4        2
   1116       10        8        3        9       11       11        4
   1123       12        6       18       35       99      238      376
   1130      577      485      285      121       41        6        5
   1137        3        2        0        2        3        3        3
   1144        3        2        1        8        3        5        2
   1151        2        8        3        3        1        1        2
PERCENT  ANTIMONY                      .0334
    % RSD COUNTING      2.1
   1284        6        1        5        2        5        2        3
   1291        3        4        6        5        7        3        1
   1298        1        4        6        3        3        3        3
   1305        2        3        3        5        4        2        3
   1312        5        2        3        6        2        0        5
   1319        4        3        2        3        8        1        3
   1326        1        1        1        2        3        3        7
   1333        2        2        4        4        2        0        3
PERCENT  ARSENIC                       .0000
    % RSD COUNTING   1407.1
CENTROID CHANNEL COPPER        1024     HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130               SB-122   4043 MIN.
                 ARSENIC       1312               AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02     BACKGROUND SPACING:
                 ANTIMONY    149.64        COPPER    25
                 ARSENIC      31.07        ANTIMONY  25
CONSTANTS:                                ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0050:41

RF   PB   0303B-2

SAMPLE TIME		2JAN80 1033:00	LOCATION	AFFRI		
ACQUISITION TIME		2JAN80 1614:24	TYPE	7.5MIN.		
PRESET TIME	300 SEC		GEOMETRY	SHELF 1	0.250	
ELAPSED TIME	300 SEC		VOLUME	UG	9014.000	
LIVE TIME	300 SEC		DETECTOR	GELI 15		

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                            OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B = 10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	5	5	8	3	3	9	9
1002	6	2	5	1	2	5	0
1009	4	5	4	7	5	5	10
1016	8	6	10	5	21	25	35
1023	36	40	28	34	19	12	12
1030	7	4	3	5	3	6	6
1037	3	2	5	4	5	3	4
1044	4	10	3	5	3	2	8

PERCENT COPPER   .0021
   % RSD COUNTING   8.6

1102	6	4	7	2	4	6	5
1109	8	4	5	8	5	6	5
1116	2	6	6	5	4	6	4
1123	9	8	23	24	109	263	400
1130	513	464	258	114	36	13	12
1137	3	4	3	2	0	1	2
1144	4	5	4	1	2	4	5
1151	3	4	4	4	5	4	3

PERCENT ANTIMONY   .0328
   % RSD COUNTING   2.2

1288	3	5	0	1	5	5	8
1295	1	3	6	3	2	4	3
1302	2	2	3	3	2	3	1
1309	2	1	0	2	0	2	2
1316	1	5	1	4	3	6	1
1323	4	3	2	4	1	2	1
1330	1	4	1	3	2	3	1
1337	3	6	4	3	4	6	1

PERCENT ARSENIC   -.0001
   % RSD COUNTING   -313.2

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.	
	ANTIMONY	1130	SB-122	4043 MIN.	
	ARSENIC	1316	AS-76	1584 MIN.	
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:		
	ANTIMONY	149.64	COPPER	25	
	ARSENIC	31.07	ANTIMONY	25	
CONSTANTS:			ARSENIC	10	
E=2.7183			BACKGROUND CHANNELS	10	
LN2=.69315					

EXPERIMENT 1   3JAN80 0052:34

RF   PB   Q303B-3

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1619:38   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   300 SEC   VOLUME   UG   9229.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

                   NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

     996   5   2   3   6   3   5   8
    1003   6   11   8   5   4   8   9
    1010   9   8   4   6   4   13   7
    1017   11   11   17   20   16   29   38
    1024   38   35   27   26   17   8   5
    1031   7   6   6   5   5   7   4
    1038   3   2   5   5   2   3   3
    1045   4   3   4   4   9   5   2

PERCENT COPPER   .0020
    % RSD COUNTING   8.6
    1102   5   7   3   7   8   4   2
    1109   4   4   6   2   8   3   8
    1116   5   7   9   6   8   9   5
    1123   4   7   16   31   93   241   427
    1130   554   493   324   124   33   19   1
    1137   2   0   3   1   3   5   5
    1144   5   3   5   4   3   5   6
    1151   5   9   4   2   0   0   1

PERCENT ANTIMONY   .0342
    % RSD COUNTING   2.1
    1286   3   3   0   0   2   1   3
    1293   7   6   4   3   2   4   3
    1300   1   5   0   3   1   2   2
    1307   5   2   4   1   3   2   4
    1314   4   3   7   1   0   2   5
    1321   3   3   2   1   7   2   2
    1328   1   0   1   2   3   2   0
    1335   5   2   2   3   6   1   1

PERCENT ARSENIC   .0006
    % RSD COUNTING   80.1

CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1314   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0054:28

RF                    PB                    0303C-1

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 1624:52    TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1        0.250
ELAPSED TIME     302 SEC                  VOLUME     UG        11899.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15


CALIBRATION DATE        5OCT79 1357:49    KEV/CH          0.500
                                          OFFSET          0.543


                    NORMALIZATION CONSTANTS     GAMMA
FWHM              5    A =     2.000       SLOPE           0.500 E-3
SENSITIVITY      16    B =    10.000       OFFSET          4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)   80.00


    996       10       17       20       14       13       14       20
   1003       10       21       14       17       17       10       19
   1010       17       12       11       17       13       14       20
   1017       20       19       31       20       33       46       51
   1024       54       50       57       36       25       23       14
   1031       18       10       12       13     \ 15       13       20
   1038       17       13       15       21       13       20       16
   1045        8        7        6       14       16        9       15
PERCENT COPPER                              .0020
    % RSD COUNTING        8.9
   1102       21       11       15       17       13       13       15
   1109       17        9       13       19       17       15       11
   1116       17       29       30       35       39       34       31
   1123       28       38       55      188      420     1041     1796
   1130     2236     1872     1222      452      132       35       10
   1137        7        6        6        5        3        5        4
   1144        3        7        1        5        1        6        4
   1151        4        5        3        2        4        3        8
PERCENT ANTIMONY                            .1071
    % RSD COUNTING        1.0
   1287        6        2        2        5        8        2        6
   1294        8        5        4        3        6        0        1
   1301        1        3        1        6        4        4        5
   1308        3        4        4        1        5        3        3
   1315        5       11        5        4        5        2        2
   1322        0        4        3        3        4        6        5
   1329        6        3        2        4        5        4        3
   1336        1        3        4        3        1        4        1
PERCENT ARSENIC                             .0005
    % RSD COUNTING      100.0
CENTROID CHANNEL COPPER        1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02    BACKGROUND SPACING:
                 ANTIMONY    149.64        COPPER    25
                 ARSENIC      31.07        ANTIMONY  25
CONSTANTS:                                ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   2JAN80 0056:21

RF   PB   Q303C-2

SAMPLE TIME		2JAN80 1033:00	LOCATION	AFFRI	
ACQUISITION TIME		2JAN80 1630:07	TYPE	7.5MIN.	
PRESET TIME	300 SEC		GEOMETRY	SHELF 1	0.250
ELAPSED TIME	302 SEC		VOLUME	UG	12855.000
LIVE TIME	300 SEC		DETECTOR	GELI 15	

CALIBRATION DATE		5OCT79 1357:49	KEV/CH	0.500
			OFFSET	0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	12	19	14	15	24	21	17
1002	9	22	25	17	17	17	13
1009	10	10	15	11	15	14	16
1016	13	14	16	30	28	57	50
1023	68	62	50	40	27	21	22
1030	12	18	7	13	19	12	18
1037	20	10	14	13	20	11	14
1044	15	13	14	21	16	22	14

PERCENT COPPER   .0019
    % RSD COUNTING   9.5

1102	19	13	9	17	19	18	18
1109	9	19	24	12	26	20	24
1116	20	19	33	32	40	32	34
1123	31	50	63	179	487	1211	2073
1130	2804	2218	1425	550	148	34	9
1137	8	5	1	3	12	4	5
1144	9	10	4	6	3	7	8
1151	3	2	6	5	3	11	1

PERCENT ANTIMONY   .1182
    % RSD COUNTING   .9

1286	2	6	3	6	3	6	13
1293	11	14	6	2	5	6	3
1300	7	9	3	5	9	6	6
1307	5	1	2	3	8	6	2
1314	7	6	4	5	8	4	4
1321	7	3	3	5	4	2	4
1328	5	5	1	7	3	5	1
1335	1	5	5	2	5	5	3

PERCENT ARSENIC   .0003
    % RSD COUNTING   144.4

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1314	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0058:15

RF                      PB                      0303C-3

SAMPLE TIME             2JAN80 1033:00    LOCATION    AFFRI
ACQUISITION TIME        2JAN80 1635:22    TYPE        7.5MIN.
PRESET TIME       300 SEC                 GEOMETRY    SHELF 1        0.250
ELAPSED TIME      302 SEC                 VOLUME      UG        10012.000
LIVE TIME         300 SEC                 DETECTOR    GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH          0.500
                                          OFFSET          0.543

                    NORMALIZATION CONSTANTS     GAMMA
FWHM              5    A =    2.000         SLOPE          0.500 E-3
SENSITIVITY      16    B =   10.000         OFFSET         4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00

    996        17        14        18        19        12        18        18
   1003        13        11         9        19        13        17         8
   1010        12        11        18        13         8         9        10
   1017        14        14        21        20        33        42        57
   1024        54        48        43        22        22        17        17
   1031        12         6        13        13        17        15        11
   1038        14         7         9        10        16        10        14
   1045        14        14         7        12         7        15        15
PERCENT COPPER                                    .0021
    % RSD COUNTING       9.7
   1102        15        19        10        18        21        11         7
   1109        10        23        11        11        11        19        14
   1116        17        16        19        33        30        28        39
   1123        26        28        67       154       440       955      1638
   1130      2082      1848      1093       457       130        32         6
   1137         7         5         0         4         3         5         4
   1144         4         8         5         2         6         4         5
   1151         3         1         5         6         1         0         5
PERCENT ANTIMONY                                 .1200
    % RSD COUNTING       1.0
   1284         3         3         3         7         4         6         4
   1291         5         5         7         9         9         3         5
   1298         4         6         3         3         2         5         5
   1305         1         3         4         3         5         4         0
   1312         5         3         6         3         4         3         1
   1319         1         3         3         5         2         2         3
   1326         3         4         2         2         3         4         6
   1333         5         2         3         4         2         4         5
PERCENT ARSENIC                                  .0002
    % RSD COUNTING     241.6
CENTROID CHANNEL COPPER        1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130              SB-122   4043 MIN.
                 ARSENIC       1312              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER       257.02    BACKGROUND SPACING:
                 ANTIMONY     149.64        COPPER    25
                 ARSENIC       31.07        ANTIMONY  25
CONSTANTS:                                  ARSENIC   10
    E=2.7183                       BACKGROUND CHANNELS 10
    LN2=.69315
```

EXPERIMENT 1   3JAN80 0100:09

RF   PB   Q303D-1

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 1640:37	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	302 SEC	VOLUME	UG 9264.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

996	16	15	12	12	14	16	13
1003	12	15	9	8	17	14	9
1010	13	17	7	12	17	19	18
1017	13	12	18	23	26	42	48
1024	52	47	48	34	17	22	16
1031	13	16	11	8	5	14	11
1038	11	13	11	5	13	16	18
1045	10	13	9	15	11	16	8

PERCENT COPPER   .0024
   % RSD COUNTING   9.4

1102	11	14	9	13	11	8	9
1109	14	21	13	19	15	15	16
1116	15	13	25	27	34	18	25
1123	25	35	42	120	406	898	1624
1130	2087	1842	1133	446	120	29	7
1137	3	5	3	8	6	7	8
1144	5	3	5	4	4	2	5
1151	4	6	1	3	6	5	5

PERCENT ANTIMONY   .1288
   % RSD COUNTING   1.0

1288	2	3	4	7	8	8	7
1295	5	2	2	5	3	4	5
1302	4	2	1	10	2	3	6
1309	7	3	4	4	6	2	7
1316	9	6	4	8	2	3	5
1323	4	6	2	4	3	3	4
1330	7	1	7	2	6	2	1
1337	2	3	3	4	3	7	2

PERCENT ARSENIC   .0011
   % RSD COUNTING   59.7

CENTROID CHANNEL	COPPER	1024	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1130		SB-122	4043 MIN.
	ARSENIC	1316		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:		
	ANTIMONY	149.64		COPPER	25
	ARSENIC	31.07		ANTIMONY	25

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0102:02

 RF                    PB                    Q303D-2

 SAMPLE TIME           2JAN80 1033:00   LOCATION   AFFRI
 ACQUISITION TIME      2JAN80 1645:52   TYPE       7.5MIN.
 PRESET TIME     300 SEC                GEOMETRY   SHELF 1        0.250
 ELAPSED TIME    302 SEC                VOLUME     UG        12755.000
 LIVE TIME       300 SEC                DETECTOR   GELI 15

 CALIBRATION DATE      5OCT79 1357:49   KEV/CH          0.500
                                        OFFSET          0.543

                        NORMALIZATION CONSTANTS    GAMMA
 FWHM              5    A =    2.000          SLOPE       0.500 E-3
 SENSITIVITY      16    B =   10.000          OFFSET      4.500
 LIBRARY NUMBER    1    ENERGY TOLERANCE     1.25
 HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00

    996      20       17       21       18       21       26       20
   1003      20       20       18       17       14       17       14
   1010      13       19       15       14       21       19       23
   1017      19       20       31       35       44       55       79
   1024      74       57       61       49       29       19       19
   1031      16       22       10       11       12       18       15
   1038      15       15       15       15       12       14       12
   1045      15       16       14       14       20       17        8
 PERCENT  COPPER                       .0025
    % RSD COUNTING       7.8
   1102      16       17       18       15       22       18       18
   1109      21       22       18       30       28       17       22
   1116      28       18       38       43       72       52       39
   1123      38       45       79      205      557     1230     2286
   1130    2865     2483     1572      663      176       43       14
   1137       8        5        7        5        2       11        8
   1144       2        5        6        6        8        7        7
   1151       1       11        4        6        6        5        3
 PERCENT  ANTIMONY                     .1293
    % RSD COUNTING        .9
   1287       4        5        4        5        8        3       16
   1294       7        6       16        4        4        5        7
   1301       1        3        5        2        5        1        3
   1308       1        7        4        3        3        9        5
   1315       5        5        6        5        1        4        8
   1322       3        2        5        7        4        1        2
   1329       2        4        7        6        8        4        6
   1336       2        1        3        6        3        4        3
 PERCENT  ARSENIC                      .0008
    % RSD COUNTING       58.5
 CENTROID CHANNEL COPPER      1024   HALF-LIFE CU-64     768 MIN.
                  ANTIMONY    1130             SB-122   4043 MIN.
                  ARSENIC     1315             AS-76    1584 MIN.
 COUNTS/MICROGRAM COPPER    257.02   BACKGROUND SPACING:
                  ANTIMONY  149.64      COPPER    25
                  ARSENIC    31.07      ANTIMONY  25
 CONSTANTS:                            ARSENIC   10
    E=2.7183                        BACKGROUND CHANNELS 10
    LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0103:56

RF   PB   Q303D-3

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1651:07   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   302 SEC   VOLUME   UG   13108.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                        OFFSET   0.543

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

996	29	17	15	16	23	19	18
1003	13	20	12	20	19	23	17
1010	18	24	18	12	19	20	23
1017	15	19	19	38	45	67	79
1024	71	55	58	55	31	28	17
1031	12	17	19	20	19	9	9
1038	22	19	13	15	8	18	18
1045	26	20	14	14	20	15	11

PERCENT COPPER   .0026
    % RSD COUNTING   7.4

1102	12	20	19	12	24	19	24
1109	19	21	19	27	18	17	17
1116	19	18	36	34	47	48	29
1123	37	38	77	203	584	1384	2353
1130	3031	2688	1657	700	192	41	11
1137	10	8	7	12	2	6	2
1144	8	3	5	5	6	10	5
1151	4	8	5	7	7	3	4

PERCENT ANTIMONY   .1340
    % RSD COUNTING   .9

1285	5	6	1	3	5	4	2
1292	10	6	12	4	6	4	6
1299	5	2	3	6	2	3	3
1306	3	2	3	5	8	9	4
1313	4	4	2	7	7	1	6
1320	9	7	7	5	2	4	6
1327	4	4	5	5	7	3	5
1334	10	6	5	5	5	7	2

PERCENT ARSENIC   .0004
    % RSD COUNTING   95.4

CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122 4043 MIN.
                 ARSENIC   1313   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0105:49

RF   PB   Q303E-1

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1656:23   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   301 SEC   VOLUME   UG   13824.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                        NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

    996   7   2   4   5   .   4   7   6
   1003   6   11   12   7   2   8   5
   1010   8   4   9   8   12   8   11
   1017   9   8   10   28   33   40   52
   1024   49   59   34   31   11   8   10
   1031   6   6   4   7   6   5   5
   1038   4   4   8   4   5   3   5
   1045   6   9   3   3   8   6   5
PERCENT COPPER   .0021
   % RSD COUNTING   6.8
   1102   3   5   5   4   7   5   7
   1109   10   7   6   6   6   8   4
   1116   7   9   4   6   12   5   8
   1123   8   11   27   54   119   332   594
   1130   745   663   397   166   49   8   6
   1137   4   4   0   4   1   4   1
   1144   3   2   2   7   3   5   2
   1151   5   2   1   3   4   2   2
PERCENT ANTIMONY   .0308
   % RSD COUNTING   1.8
   1287   3   1   2   2   0   4   3
   1294   1   4   4   2   2   4   3
   1301   2   3   4   2   0   3   6
   1308   3   4   2   1   4   3   7
   1315   2   3   3   5   2   1   1
   1322   4   3   2   1   5   7   4
   1329   2   2   4   1   1   0   4
   1336   1   5   4   3   3   1   4
PERCENT ARSENIC   .0002
   % RSD COUNTING   181.4
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY 149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0107:43

RF   PB   Q303E-2

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1701:37   TYPE   7. 5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0. 250
ELAPSED TIME   300 SEC   VOLUME   UG   11600. 000
LIVE TIME   300 SEC   .   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0. 500
                                           OFFSET   0. 543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2. 000   SLOPE   0. 500 E-3
SENSITIVITY   16   B =   10. 000   OFFSET   4. 500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1. 25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80. 00

995	3	9	5	7	3	8	4
1002	9	2	5	7	8	8	6
1009	8	8	6	2	4	4	9
1016	9	7	5	13	21	20	33
1023	52	51	54	37	21	7	10
1030	1	6	7	9	4	4	5
1037	5	7	5	3	3	3	4
1044	4	3	5	2	3	5	3

PERCENT COPPER   . 0022
   % RSD COUNTING   7. 4

1102	3	9	5	9	7	5	6
1109	11	5	7	5	3	11	6
1116	8	9	8	8	12	3	8
1123	11	11	18	50	116	259	532
1130	684	624	387	160	51	5	5
1137	1	2	1	0	5	3	2
1144	1	2	4	2	2	4	4
1151	1	2	1	4	5	2	2

PERCENT ANTIMONY   . 0336
   % RSD COUNTING   1, 9

1288	4	1	2	3	3	5	3
1295	4	1	5	4	1	0	2
1302	1	2	1	3	0	3	5
1309	5	0	2	1	2	1	4
1316	4	4	2	3	3	1	1
1323	5	4	1	1	5	0	1
1330	2	4	0	4	1	1	3
1337	2	3	1	4	2	2	2

PERCENT ARSENIC   . 0002
   % RSD COUNTING   154. 0

CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257. 02   BACKGROUND SPACING:
                 ANTIMONY   149. 64   COPPER   25
                 ARSENIC   31. 07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2. 7183   BACKGROUND CHANNELS 10
   LN2=. 69315

EXPERIMENT 1   3JAN80 0109:36

RF   PB   Q303E-3

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 1706:51	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	300 SEC	VOLUME	UG 8545.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

996	4	2	10	3	6	8	5
1003	5	8	6	6	5	5	4
1010	4	3	5	7	3	3	4
1017	7	4	10	17	21	32	43
1024	35	35	27	28	8	7	6
1031	3	5	4	4	4	7	4
1038	6	2	7	4	2	7	6
1045	1	3	5	7	4	5	6

PERCENT COPPER   .0023
% RSD COUNTING   8.8

1102	4	1	8	1	5	4	4
1109	7	1	6	2	3	6	7
1116	4	11	3	5	6	6	6
1123	9	10	13	36	103	204	418
1130	526	440	291	112	38	8	1
1137	3	2	0	2	2	0	1
1144	2	3	5	0	0	3	2
1151	3	4	1	2	4	3	1

PERCENT ANTIMONY   .0347
% RSD COUNTING   2.2

1287	0	1	2	4	2	2	6
1294	5	4	3	0	3	3	2
1301	1	5	0	2	2	2	0
1308	1	2	0	1	3	4	3
1315	0	1	0	4	2	4	1
1322	3	3	1	2	4	2	1
1329	0	5	0	1	2	2	2
1336	2	3	1	2	5	2	2

PERCENT ARSENIC   .0002
% RSD COUNTING   218.8

CENTROID CHANNEL	COPPER	1024	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0111:30

RF                      PB                      Q303F-1

SAMPLE TIME             2JAN80 1033:00  LOCATION    AFFRI
ACQUISITION TIME        2JAN80 1712:05  TYPE        7.5MIN.
PRESET TIME     300 SEC                 GEOMETRY    SHELF 1      0.250
ELAPSED TIME    301 SEC                 VOLUME      UG        6637.000
LIVE TIME       300 SEC                 DETECTOR    GELI 15

CALIBRATION DATE        5OCT79 1357:49  KEV/CH          0.500
                                        OFFSET          0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000           SLOPE       0.500 E-3
SENSITIVITY       16    B =   10.000           OFFSET      4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    996       12         9         5         9        11        10         8
   1003       10        14         7         5         8        13        10
   1010       11         5        12        13        12         9        12
   1017        4        20        19        23        24        33        28
   1024       31        25        37        31        10         7        13
   1031       15         6         6         6         9        12         8
   1038        9         5        10        12         4        15         8
   1045        9         6         8         8         6         4         8
PERCENT COPPER                        .0026
   % RSD COUNTING       10.5
   1102       15        11         9        16         6        13        12
   1109       11         9        15         7        13        14         5
   1116       10        19        17        16        20        17        15
   1123       14        25        33        76       262       600      1102
   1130     1361      1135       742       311        99        25         2
   1137        3         3         3         5         1         2         3
   1144        5         3         5         0         7         3         0
   1151        2         4         6         2         1         4         2
PERCENT ANTIMONY                      .1178
   % RSD COUNTING        1.3
   1284        1         1         2         3         2         5         3
   1291        5         6         4         3         5         2         1
   1298        4         4         2         3         2         3         4
   1305        0         1         5         0         6         5         2
   1312        1         2         6         1         3         4         2
   1319        3         7         6         1         2         3         2
   1326        1         1         2         2         3         2         2
   1333        4         1         1         2         5         1         2
PERCENT ARSENIC                       -.0000
   % RSD COUNTING    -6789.7
CENTROID CHANNEL COPPER       1024   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1130             SB-122   4043 MIN.
                 ARSENIC      1312             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64      COPPER    25
                 ARSENIC     31.07      ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   3JAN80 0113:24

RF   PB   Q303F-2

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 1717:19	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	301 SEC	VOLUME	UG 6888.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE	5OCT79 1357:49	KEV/CH	0.500
		OFFSET	0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

996	8	7	6	9	9	11	10
1003	10	14	6	6	11	14	12
1010	5	6	14	10	8	12	12
1017	14	9	16	11	21	40	29
1024	38	41	23	19	10	16	7
1031	22	11	9	9	8	10	9
1038	10	8	9	4	8	7	7
1045	6	11	8	7	10	11	5

PERCENT COPPER   .0024
    % RSD COUNTING   10.7

1102	9	5	5	11	10	7	10
1109	6	4	11	7	11	8	9
1116	6	8	16	15	22	20	20
1123	15	24	37	76	259	598	1056
1130	1354	1161	707	295	97	21	8
1137	4	1	6	3	3	1	2
1144	5	5	5	1	2	4	1
1151	2	5	1	4	5	3	1

PERCENT ANTIMONY   .1122
    % RSD COUNTING   1.3

1286	5	4	4	4	5	3	5
1293	1	5	3	2	1	3	4
1300	0	4	2	4	5	4	2
1307	4	2	3	6	4	2	1
1314	4	2	2	7	3	2	3
1321	5	4	5	3	3	1	3
1328	4	3	1	7	2	3	2
1335	5	0	5	3	0	2	2

PERCENT ARSENIC   -.0001
    % RSD COUNTING   -610.5

CENTROID CHANNEL COPPER	1024	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1130	SB-122	4043 MIN.
ARSENIC	1314	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	257.02	BACKGROUND SPACING:	
ANTIMONY	149.64	COPPER	25
ARSENIC	31.07	ANTIMONY	25
CONSTANTS:		ARSENIC	10
E=2.7183		BACKGROUND CHANNELS 10	
LN2=.69315			

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0115:17

RF                    PB                    Q303F-3                  .

SAMPLE TIME           2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME      2JAN80 1722:33    TYPE       7.5MIN.
PRESET TIME     300 SEC                 GEOMETRY   SHELF 1        0.250
ELAPSED TIME    301 SEC                 VOLUME     UG          9005.000
LIVE TIME       300 SEC                 DETECTOR   GELI 15


CALIBRATION DATE      5OCT79 1357:49    KEV/CH          0.500
                                        OFFSET          0.543


                   NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000          SLOPE        0.500 E-3
SENSITIVITY      16    B =   10.000          OFFSET       4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00

   996       12       15       10       11       14       15       16
  1003       10        8        9       15       14       11       14
  1010       20       13       13        6       10       13       11
  1017        8       11       18       22       31       37       53
  1024       40       39       34       28       24       18        8
  1031       12       11        8       20        6       11       13
  1038       13        5       17       14       14       11       11
  1045       14        6       13       13       11       11        8
PERCENT  COPPER                       .0022
   % RSD COUNTING       10.5
  1102       14       15        9        8       14       10       19
  1109       12       15       20       14       16       11        5
  1116        8       15       25       26       22       36       20
  1123       26       31       52      108      350      850     1457
  1130     1825     1647      997      388      119       21       10
  1137        2        5        2        3        2        5        8
  1144        5        4        6        4        5        3        2
  1151        4        8        2        4        3        2        0
PERCENT  ANTIMONY                     .1189
   % RSD COUNTING        1.1
  1288        2        1        4        3        3        7        5
  1295        8        6        3        5        5        3        3
  1302        2        6        3        3        7        3        3
  1309        2        1        2        3        2        4        3
  1316        4        9        1        5        1        3        1
  1323        2        6        5        2        3        4        0
  1330        6        4        3        1        4        5        2
  1337        2        3        8        4        6        2        5
PERCENT  ARSENIC                      .0000
   % RSD COUNTING     1062.3
CENTROID CHANNEL COPPER        1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130              SB-122   4043 MIN.
                 ARSENIC       1316              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02    BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER    25
                 ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0117:11

RF   PB   0303G-1

SAMPLE TIME	2JAN80 1033:00	LOCATION AFFRI
ACQUISITION TIME	2JAN80 1727:48	TYPE 7.5MIN.
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 302 SEC		VOLUME UG 12463.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                            OFFSET   0.543

```
                      NORMALIZATION CONSTANTS    GAMMA
FWHM                5    A =    2.000         SLOPE        0.500 E-3
SENSITIVITY        16    B =   10.000         OFFSET       4.500
LIBRARY NUMBER      1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO     8    ABUNDANCE LIMIT (%)  80.00

   996      18       9      22      13      16      16      11
  1003       9      11      16      13      17      19      12
  1010      10      19      15      15      11       8      23
  1017      23      24      11      20      33      52      55
  1024      65      57      42      28      28      17      15
  1031      19      14       8      15      12      18      11
  1038      11       6      10       6       8       9      12
  1045      16      17      11      12      18      11      12
```

PERCENT COPPER   .0021
```
   % RSD COUNTING       8.8
  1102      15      13      21      15      17      17      13
  1109      20      12      18      16      14      22      21
  1116      22      24      37      34      36      34      36
  1123      37      29      74     159     471    1084    1933
  1130    2483    2040    1260     526     124      30      14
  1137       7       4       2       4       3       6       4
  1144       9       5       7       5       6       5       3
  1151       3       2       5       3       7       4       4
```

PERCENT ANTIMONY   .1120
```
   % RSD COUNTING       1.0
  1286       4       1       2       4       4       4       6
  1293       7       8       7       6       5       6       4
  1300       2       2       4       8       2       5       4
  1307       5       4       4       2       6       2       2
  1314       5       4      10       9       1       4       8
  1321       6       5       3       3       6       3       3
  1328       5       3       0       5       3       4       3
  1335       4       3       2       3       1       2       2
```

PERCENT ARSENIC   .0004
   % RSD COUNTING   104.4

CENTROID CHANNEL COPPER	1024	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1130	SB-122	4043 MIN.
ARSENIC	1314	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	257.02	BACKGROUND SPACING:	
ANTIMONY	149.64	COPPER 25	
ARSENIC	31.07	ANTIMONY 25	
CONSTANTS:		ARSENIC 10	
E=2.7183		BACKGROUND CHANNELS 10	
LN2=.69315			

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0119:05

RF   PB   Q303G-2

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1742:40   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   302 SEC   VOLUME   UG   11729.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    996   13   19   12   9   15   15   15
   1003   7   12   11   11   10   17   17
   1010   9   11   12   10   22   15   9
   1017   18   11   27   24   34   52   50
   1024   38   41   45   30   27   15   10
   1031   13   12   13   13   17   14   12
   1038   7   14   9   9   19   14   10
   1045   16   13   16   8   12   18   8
PERCENT COPPER   .0019
   % RSD COUNTING   9.8
   1102   11   15   15   16   14   17   12
   1109   14   12   18   18   24   20   21
   1116   17   17   22   25   35   32   31
   1123   29   36   72   179   433   1174   1928
   1130   2469   2016   1221   512   153   21   11
   1137   4   11   3   5   3   6   7
   1144   2   2   5   3   5   3   3
   1151   9   2   5   3   3   3   6
PERCENT ANTIMONY   .1188
   % RSD COUNTING   1.0
   1288   3   5   3   9   5   2   6
   1295   4   4   7   2   4   2   7
   1302   3   1   5   2   8   4   2
   1309   0   2   1   3   4   7   10
   1316   4   5   4   4   6   4   3
   1323   4   0   8   6   2   5   4
   1330   3   2   3   2   3   1   4
   1337   7   8   2   3   3   3   1
PERCENT ARSENIC   .0005
   % RSD COUNTING   95.4
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0120:59

RF                        PB                         Q303G-3

SAMPLE TIME              2JAN80 1033:00   LOCATION  AFFRI
ACQUISITION TIME         2JAN80 1748:00   TYPE      7.5MIN.
PRESET TIME     300 SEC                   GEOMETRY  SHELF 1      0.250
ELAPSED TIME    301 SEC                   VOLUME    UG        10112.000
LIVE TIME       300 SEC                   DETECTOR  GELI 15


CALIBRATION DATE         5OCT79 1357:49   KEV/CH        0.500
                                          OFFSET        0.543


                    NORMALIZATION CONSTANTS   GAMMA
FWHM              5    A =    2.000        SLOPE      0.500 E-3
SENSITIVITY     16    B =   10.000        OFFSET     4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

   996        9        12        17        18        12        14         9
  1003   .   16        14        13        16         8        14         9
  1010        6        13        11        11        11        18        15
  1017        9        14        21        17        38        35        53
  1024       34        47        48        33        16        18         9
  1031       10        11        19        12        13         8        10
  1038        5        14         5         5        13        11         9
  1045        9         5         9        11        11         9        10
PERCENT  COPPER                               .0023
   % RSD COUNTING       9.5
  1102       13        13         9        14        11        14         7
  1109       19        14        12        16        13        16         9
  1116       15        18        26        36        28        29        27
  1123       21        30        65       130       422      1036      1693
  1130     2101      1751      1046       384       108        25         4
  1137        7         4         3         1         4         3         1
  1144        3         3         3         4         5         3         6
  1151        5         0         0         2         4         5         6
PERCENT  ANTIMONY                             .1193
   % RSD COUNTING       1.0
  1285        3         2         2         2         6         5         1
  1292        7         9         6         2         6         2         3
  1299        4         4         2         3         2         1         2
  1306        5         3         4         1         4         4         5
  1313        5         5         4         9         3         3         3
  1320        2         2         2         4         2         1         1
  1327        3         0         0         0         3         4         6
  1334        3         3         4         5         1         2         4
PERCENT  ARSENIC                              .0016
   % RSD COUNTING      33.4
CENTROID CHANNEL COPPER      1024    HALF-LIFE CU-64      768 MIN.
                 ANTIMONY  · 1130              SB-122    4043 MIN.
                 ARSENIC     1313              AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER    257.02    BACKGROUND SPACING:
                 ANTIMONY  149.64       COPPER   25
                 ARSENIC    31.07       ANTIMONY 25
CONSTANTS:                             ARSENIC  10
  E=2.7183                          BACKGROUND CHANNELS 10
  LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0122:52

RF                      PB                      Q303H-1

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 1753:15    TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME     302 SEC                  VOLUME     UG        11579.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH        0.500
                                          OFFSET        0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000        SLOPE         0.500 E-3
SENSITIVITY     16    B =   10.000        OFFSET        4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

     995       14       12       17        8        8       15       17
    1002        9       17        8       12       17       21       18
    1009       13       17       10       14        7       13       18
    1016       16       18       19       27       30       38       37
    1023       62       54       64       38       30       20       19
    1030       14       15        7       13       11       11       10
    1037       11       17       12        9       20       18       16
    1044        4       11       13        7       10        9       21
PERCENT COPPER                          .0023
   % RSD COUNTING       8.4
    1102        9       21       17       12       18       12       17
    1109        9       14       20       14       17       17       20
    1116       18       17       25       38       30       41       36
    1123       27       40       47      170      486     1102     1972
    1130     2373     1935     1141      445      132       33        9
    1137        7        6        2        3        6        2       10
    1144        3        4        8        3        4        6        3
    1151        5        7        6        2        1        6        4
PERCENT ANTIMONY                        .1168
   % RSD COUNTING       1.0
    1288        1        4        2        2        5        3        2
    1295        5        4        5        0        2        0        3
    1302        3        3        4        2        2        2        5
    1309        1        5        3        3        5        1        1
    1316        5        7        8        6        3        1        2
    1323        3        8        2        3        5        4        3
    1330        6        5        5        4        2        1        2
    1337        4        1        2        3        4        3        0
PERCENT ARSENIC                         .0004
   % RSD COUNTING     108.0
CENTROID CHANNEL COPPER       1023    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1130              SB-122   4043 MIN.
                 ARSENIC      1316              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     257.02    BACKGROUND SPACING:
                 ANTIMONY   149.64        COPPER    25
                 ARSENIC     31.07        ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0124:46

RF   PB   Q303H-2

SAMPLE TIME	2JAN80 1033:00	LOCATION AFFRI
ACQUISITION TIME	2JAN80 1758:30	TYPE 7.5MIN.
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 302 SEC		VOLUME UG 13785.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                      OFFSET   0.543

                  NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER 1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

995	19	16	14	14	21	16	14
1002	13	13	18	19	18	19	14
1009	16	10	19	19	13	11	14
1016	25	15	19	17	35	27	53
1023	69	54	52	47	35	18	15
1030	12	22	16	14	19	18	20
1037	13	15	14	12	19	20	9
1044	23	13	14	14	9	14	16

PERCENT COPPER   .0019
   % RSD COUNTING   8.9

1102	23	16	12	13	21	14	17
1109	15	16	16	16	19	18	20
1116	19	21	35	36	44	43	32
1123	38	48	70	210	580	1350	2194
1130	2749	2128	1295	458	122	33	5
1137	6	4	3	6	6	4	4
1144	6	6	7	5	6	3	5
1151	3	7	4	11	2	8	6

PERCENT ANTIMONY   .1118
   % RSD COUNTING   .9

1286	2	1	4	4	4	8	13
1293	7	9	4	3	5	9	4
1300	3	2	4	2	5	1	0
1307	5	2	4	2	4	5	6
1314	3	8	10	7	4	5	2
1321	3	4	3	3	1	3	7
1328	4	2	4	3	1	1	1
1335	2	3	2	5	4	5	6

PERCENT ARSENIC   .0014
   % RSD COUNTING   31.5

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1314	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0126:39

RF                    PB            -        0303H-3

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 1803:45    TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME     302 SEC                  VOLUME     UG        11008.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH        0.500
                                          OFFSET        0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM             5    A =     2.000        SLOPE       0.500 E-3
SENSITIVITY     16    B =    10.000        OFFSET      4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    995      15      17      14      15      10      17      13
   1002      15      19      11      18      12      19      17
   1009      10      11      13      16      13      10      12
   1016      20      17      16      14      26      33      36
   1023      58      57      48      35      26      13      15
   1030      16      10      11      13       5      11      12
   1037      20      12      14       6      10       9      14
   1044      12      13      18      13      10      19      11
PERCENT COPPER                        .0020
   % RSD COUNTING     10.3
   1102      16      10      11      19      14      16      12
   1109      13      12       8      25      20      12      14
   1116      13      18      19      26      43      31      24
   1123      26      26      54     166     478    1157    1910
   1130    2319    1937    1093     423     114      19       5
   1137       8       4       4       1       5       4       7
   1144       6       6       2       8       3       4       5
   1151       2       4       4       6       4       2       4
PERCENT ANTIMONY                      .1214
   % RSD COUNTING      1.0
   1288       3       3       4       9       3      10       7
   1295       4       1       3       3       1       5       4
   1302       5       3       2       4       6       4       1
   1309       2       3       1       3       3       3       8
   1316       6       1       7       4       4       7       5
   1323       3       3       2       2       5       3       2
   1330       2       2       0       2       3       3       2
   1337       0       3       4       2       5       4       2
PERCENT ARSENIC                       .0006
   % RSD COUNTING     76.8
CENTROID CHANNEL COPPER       1023    HALF-LIFE CU-64    768 MIN.
                 ANTIMONY     1130              SB-122  4043 MIN.
                 ARSENIC      1316              AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      257.02   BACKGROUND SPACING:
                 ANTIMONY    149.64     COPPER    25
                 ARSENIC      31.07     ANTIMONY  25
CONSTANTS:                              ARSENIC   10
  E=2.7183                            BACKGROUND CHANNELS 10
  LN2=.69315
```

EXPERIMENT 1   3JAN80 0128:33

RF   PB   Q303I-1

```
SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 1809:00    TYPE       7.5MIN.
PRESET TIME     300 SEC                   GEOMETRY   SHELF 1      0.250
ELAPSED TIME    302 SEC                   VOLUME     UG        9714.000
LIVE TIME       300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH        0.500
                                          OFFSET        0.543
```

```
                  NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000        SLOPE        0.500 E-3
SENSITIVITY       16    B =   10.000        OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00
```

995	13	13	10	11	14	15	9
1002	17	14	6	10	16	15	8
1009	10	20	12	9	10	14	10
1016	15	7	17	22	24	26	54
1023	49	50	63	38	21	25	17
1030	12	14	12	12	20	13	12
1037	6	7	8	12	6	9	13
1044	11	6	13	13	10	7	9

PERCENT COPPER   .0027
    % RSD COUNTING   8.7

1102	13	19	11	12	11	10	13
1109	18	16	14	14	15	18	18
1116	17	15	17	21	38	30	32
1123	31	25	67	175	487	1044	1811
1130	2212	1717	1011	404	106	22	10
1137	3	6	5	2	3	0	5
1144	6	7	5	4	3	0	7
1151	1	4	4	4	2	4	6

PERCENT ANTIMONY   .1284
    % RSD COUNTING   1.0

1287	2	5	4	2	3	7	6
1294	3	10	6	1	5	2	1
1301	5	3	2	3	6	6	2
1308	6	3	2	3	3	1	4
1315	3	4	3	5	3	3	2
1322	5	5	4	4	2	5	2
1329	2	3	4	2	4	2	1
1336	1	0	3	2	1	3	4

PERCENT ARSENIC   -.0003
    % RSD COUNTING   -164.9

```
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64      768 MIN.
                 ANTIMONY    1130             SB-122    4043 MIN.
                 ARSENIC     1315             AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER    257.02   BACKGROUND SPACING:
                 ANTIMONY  149.64      COPPER    25
                 ARSENIC    31.07      ANTIMONY  25
CONSTANTS:                             ARSENIC   10
  E=2.7183                          BACKGROUND CHANNELS 10
  LN2=.69315
```

EXPERIMENT 1   3JAN80 0130:27

RF   PB   Q303I-2

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1814:15   TYPE   7. 5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0. 250
ELAPSED TIME   301 SEC   VOLUME   UG   8491. 000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0. 500
                                        OFFSET   0. 543

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2. 000   SLOPE   0. 500 E-3
SENSITIVITY   16   B =   10. 000   OFFSET   4. 500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1. 25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80. 00

996	14	14	15	13	10	19	13
1003	14	13	11	13	18	10	15
1010	6	14	10	11	11	11	13
1017	13	15	17	25	35	43	38
1024	38	41	35	29	17	13	10
1031	13	14	12	4	11	9	3
1038	12	10	12	9	8	7	9
1045	12	7	9	9	10	15	13

PERCENT COPPER   . 0023
  % RSD COUNTING   10. 9

1102	12	9	13	14	16	17	8
1109	12	9	10	13	5	13	12
1116	13	18	14	32	36	27	24
1123	25	26	48	160	427	943	1525
1130	1916	1603	904	360	87	20	8
1137	3	6	4	4	2	1	1
1144	2	6	2	5	8	5	3
1151	2	5	2	3	4	3	5

PERCENT ANTIMONY   . 1298
  % RSD COUNTING   1. 1

1288	0	4	2	2	2	6	6
1295	3	4	2	8	0	4	3
1302	0	1	0	4	4	2	3
1309	0	3	7	0	2	4	11
1316	8	3	9	3	6	5	1
1323	3	3	2	3	4	3	1
1330	1	3	6	4	6	3	1
1337	8	2	3	2	4	1	3

PERCENT ARSENIC   . 0018
  % RSD COUNTING   37. 8

CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257. 02 BACKGROUND SPACING:
                 ANTIMONY   149. 64   COPPER   25
                 ARSENIC   31. 07   ANTIMONY 25
CONSTANTS: ARSENIC 10
  E=2. 7183   BACKGROUND CHANNELS 10
  LN2=. 69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0132:20

RF   PB   Q303I-3

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1819:30   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   302 SEC   VOLUME   UG   8593.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                        NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

   996   10   20   16   13   10   10   12
  1003   18   9   13   15   14   12   8
  1010   19   14   9   5   12   12   9
  1017   13   12   22   18   28   31   47
  1024   47   56   44   22   25   16   10
  1031   19   13   7   10   10   11   11
  1038   9   12   14   12   9   11   15
  1045   10   11   14   7   19   12   11
PERCENT COPPER   .0025
   % RSD COUNTING   10.4
  1102   12   17   11   15   8   12   12
  1109   15   12   17   14   13   13   7
  1116   9   23   15   27   40   26   29
  1123   30   24   68   174   450   1016   1699
  1130   2058   1709   956   387   122   26   9
  1137   3   4   8   4   5   5   4
  1144   3   5   4   7   3   3   6
  1151   2   5   4   5   0   2   1
PERCENT ANTIMONY   .1386
   % RSD COUNTING   1.1
  1285   3   3   1   1   4   4   1
  1292   4   9   7   1   7   3   4
  1299   2   6   4   5   5   2   2
  1306   4   3   3   4   8   4   2
  1313   4   4   5   7   2   6   1
  1320   5   6   4   5   2   3   1
  1327   4   3   2   2   2   2   4
  1334   2   3   3   2   2   3   5
PERCENT ARSENIC   .0006
   % RSD COUNTING   105.1
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1313   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    2JAN80 0134:14

RF                   PB                      Q303J-1

SAMPLE TIME            2JAN80 1033:00   LOCATION  AFFRI
ACQUISITION TIME       2JAN80 1824:45   TYPE      7.5MIN.
PRESET TIME      300 SEC                GEOMETRY  SHELF 1       0.250
ELAPSED TIME     301 SEC                VOLUME    UG       12190.000
LIVE TIME        300 SEC                DETECTOR  GELI 15

CALIBRATION DATE       5OCT79 1357:49   KEV/CH         0.500
                                        OFFSET         0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =     2.000      SLOPE          0.500 E-3
SENSITIVITY     16   B =    10.000      OFFSET         4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

    996        12        8        10        6        7        7        7
   1003         8       10         6        5       13        8       15
   1010         3        6         8       13        6        6        5
   1017         4       10        19       13       27       26       30
   1024        29       33        22       14       11        5        9
   1031         7        9         7        6        6        7        8
   1038         8        3         9        5        7        7        5
   1045         8        6         4        6        4        4        6
PERCENT COPPER                          .0013
   % RSD COUNTING      10.8
   1102         9        3        10        8        7        7       11
   1109         4        7        11       11        9        7        7
   1116         9       10         5        6       10        9       21
   1123        13        8        36       76      221      572      909
   1130      1096      922       490      190       56       21        1
   1137         2        1         2        1        4        2        0
   1144         3        2         3        4        4        0        2
   1151         5        4         2        5        0        2        5
PERCENT ANTIMONY                        .0519
   % RSD COUNTING       1.5
   1284         5        2         3        4        1        1        0
   1291         2        2         3        2        0        5        1
   1298         2        3         3        0        6        0        3
   1305         3        3         0        3        3        2        3
   1312         4        3         4        2        1        3        2
   1319         0        3         3        0        3        2        3
   1326         2        4         3        2        3        1        1
   1333         3        4         3        2        1        3        4
PERCENT ARSENIC                         .0003
   % RSD COUNTING     124.3
CENTROID CHANNEL COPPER        1024   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130             SB-122   4043 MIN.
                 ARSENIC       1312             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02   BACKGROUND SPACING:
                 ANTIMONY    149.64      COPPER    25
                 ARSENIC      31.07      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    2JAN80 0136:08

RF                      PB                      Q303J-2

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 1829:59    TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME     301 SEC                  VOLUME     UG       10537.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH        0.500
                                          OFFSET        0.543

                        NORMALIZATION CONSTANTS    GAMMA
FWHM              5      A =    2.000      SLOPE         0.500 E-3
SENSITIVITY     16      B =   10.000      OFFSET        4.500
LIBRARY NUMBER   1      ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8      ABUNDANCE LIMIT (%)  80.00

     996      6        8        4        8       10        6        5
    1003      4        4        4        7        6       11        5
    1010      9        7        7        3        5       11        7
    1017      7       11        7       17       22       29       27
    1024     31       30       22       25       18       10        8
    1031      6       10       10        6        6        8        5
    1038      4        5        5        5        5        7        4
    1045      3        4        8        3        3        9        9
PERCENT COPPER                           .0015
    % RSD COUNTING     11.0
    1102      5        5        5        5        8        6        3
    1109     10        6        7        8       10        5        6
    1116      7        4        9        8        7        7        9
    1123     13       10       19       63      163      454      826
    1130    893      769      490      161       51       10        4
    1137      5        2        6        5        2        4        2
    1144      4        3        6        2        4        3        2
    1151      1        2        0        2        7        9        3
PERCENT ANTIMONY                         .0512
    % RSD COUNTING      1.6
    1285      1        1        2        3        5        3        4
    1292      3        6        5        0        4        3        3
    1299      3        3        1        4        0        1        4
    1306      3        3        2        3        3        4        6
    1313      3        3        0        6        1        1        1
    1320      3        5        1        2        3        0        0
    1327      1        0        4        1        1        0        1
    1334      5        0        3        5        7        2        0
PERCENT ARSENIC                          .0007
    % RSD COUNTING     61.1
CENTROID CHANNEL COPPER        1024   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130             SB-122   4043 MIN.
                 ARSENIC       1313             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02   BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER    25
                 ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0138:01

RF                      PB                      Q303J-3

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 1835:13    TYPE       7.5MIN.
PRESET TIME     300 SEC                   GEOMETRY   SHELF 1      0.250
ELAPSED TIME    300 SEC                   VOLUME     UG        8097.000
LIVE TIME       300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH        0.500
                                          OFFSET        0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000        SLOPE        0.500 E-3
SENSITIVITY     16    B =   10.000        OFFSET       4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    996        7        13        2        5        6        6        5
   1003        6         1        7        4        3        4        7
   1010        8         7        9        8       10       10        8
   1017        5         7        8        9        8       29       23
   1024       21        19       26       15        8        4       11
   1031        7         3        8        5        5        6        4
   1038        2         5        5        3        5        7        6
   1045        6         4        2        5        7        0        4
PERCENT COPPER                            .0015
   % RSD COUNTING        12.5
   1102        8         0        6        7        7        4        9
   1109        6         6        2        4        3        4        6
   1116       12         8        5        3        9        9       16
   1123        6        13       29       54      166      374      622
   1130      759       620      348      134       50       15        2
   1137        2         2        6        3        3        4        3
   1144        6         2        1        1        2        1        5
   1151        3         0        2        1        2        3        2
PERCENT ANTIMONY                         .0538
   % RSD COUNTING         1.8
   1286        1         7        1        2        4        1        3
   1293        5         6        2        2        2        1        1
   1300        1         2        3        3        2        0        2
   1307        1         1        2        1        2        4        1
   1314        4         7        4        3        1        1        5
   1321        1         3        3        1        2        0        1
   1328        4         2        3        0        1        1        3
   1335        1         1        2        0        1        4        2
PERCENT ARSENIC                          .0011
   % RSD COUNTING        52.8
CENTROID CHANNEL COPPER       1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1130              SB-122   4043 MIN.
                 ARSENIC      1314              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     257.02    BACKGROUND SPACING:
                 ANTIMONY   149.64       COPPER    25
                 ARSENIC     31.07       ANTIMONY  25
CONSTANTS:                              ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

RF   PB   Q303K-1

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI	
ACQUISITION TIME	2JAN80 1840:27	TYPE	7.5MIN.	
PRESET TIME	300 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	300 SEC	VOLUME	UG	11530.000
LIVE TIME	300 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                              OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3	
SENSITIVITY	16	B = 10.000		OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25			
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00			

996	4	5	5	4	6	5	4
1002	3	5	4	10	5	5	2
1010	7	2	7	11	4	7	4
1017	9	11	9	20	28	24	44
1024	41	38	37	29	18	8	6
1031	7	6	3	4	4	7	0
1038	4	3	7	5	5	6	4
1045	10	2	5	6	3	6	4

PERCENT COPPER   .0021

% RSD COUNTING   8.0

1102	8	6	5	5	6	8	7
1109	8	4	4	5	3	6	1
1116	6	3	5	4	5	9	7
1123	6	11	16	48	131	315	530
1130	647	533	315	137	36	10	3
1137	2	2	4	1	4	2	1
1144	4	3	2	4	2	3	0
1151	4	1	4	6	2	3	5

PERCENT ANTIMONY   .0324

% RSD COUNTING   1.9

1288	2	5	4	3	3	5	4
1295	0	3	7	1	5	0	0
1302	2	2	3	0	0	1	0
1309	2	0	1	3	0	6	4
1316	1	3	7	4	4	4	6
1323	2	2	2	3	2	1	2
1330	7	3	2	4	1	2	3
1337	1	0	0	6	0	3	2

PERCENT ARSENIC   .0010

% RSD COUNTING   38.8

CENTROID CHANNEL	COPPER	1024	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

EXPERIMENT 1   3JAN80 0141:49

RF   PB   Q303K-2

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 1845:41	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	300 SEC	VOLUME	UG 10293.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE	5OCT79 1357:49	KEV/CH	0.500
		OFFSET	0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

995	5	5	6	6	3	5	4
1002	1	7	4	6	3	7	4
1009	4	7	10	2	4	6	7
1016	6	5	9	12	17	16	36
1023	40	42	30	41	17	4	9
1030	6	6	5	4	6	4	3
1037	4	1	4	5	1	6	7
1044	4	0	6	6	3	9	3

PERCENT COPPER   .0021
   % RSD COUNTING   8.6

1102	4	3	1	4	5	5	5
1109	2	1	8	7	5	5	7
1116	10	10	8	8	2	6	6
1123	9	5	17	33	120	290	531
1130	645	510	272	107	27	5	2
1137	1	1	3	0	4	1	2
1144	2	2	3	3	1	3	2
1151	2	1	2	1	2	4	2

PERCENT ANTIMONY   .0346
   % RSD COUNTING   2.0

1288	2	3	5	1	2	4	0
1295	4	3	3	1	2	1	3
1302	3	3	1	1	2	3	3
1309	1	0	0	2	2	2	1
1316	1	0	0	4	1	2	1
1323	2	3	1	2	6	1	0
1330	3	3	1	0	1	1	3
1337	1	3	5	4	2	0	3

PERCENT ARSENIC   -.0004
   % RSD COUNTING   -83.7

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0143:42

RF   PB   0303K-3

SAMPLE TIME		2JAN80 1033:00	LOCATION	AFFRI	
ACQUISITION TIME		2JAN80 1850:55	TYPE	7.5MIN.	
PRESET TIME	300 SEC		GEOMETRY	SHELF 1	0.250
ELAPSED TIME	300 SEC		VOLUME	UG	9680.000
LIVE TIME	300 SEC		DETECTOR	GELI 15	

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

996	2	4	2	7	2	8	5
1003	9	9	4	4	6	6	5
1010	4	2	6	10	1	2	9
1017	8	10	8	20	21	28	45
1024	31	42	26	24	6	6	4
1031	5	5	10	6	5	8	3
1038	3	2	5	6	8	4	6
1045	6	4	5	4	6	5	4

PERCENT COPPER   .0023
    % RSD COUNTING   8.5

1102	2	1	10	4	6	7	0
1109	1	7	5	4	4	3	4
1116	7	4	5	6	7	9	7
1123	5	9	18	50	132	287	506
1130	589	549	241	101	25	9	5
1137	1	1	3	1	1	2	1
1144	3	0	5	3	1	2	1
1151	5	2	1	3	3	4	1

PERCENT ANTIMONY   .0357
    % RSD COUNTING   2.0

1284	0	1	1	0	1	2	4
1291	3	0	4	2	3	3	2
1298	1	3	3	1	4	1	1
1305	2	1	2	2	6	4	2
1312	1	2	5	3	1	2	6
1319	1	4	2	1	1	2	0
1326	2	0	1	0	0	4	1
1333	5	1	1	1	3	0	0

PERCENT ARSENIC   .0007
    % RSD COUNTING   67.5

CENTROID CHANNEL	COPPER	1024	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1130		SB-122	4043 MIN.
	ARSENIC	1312		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:		
	ANTIMONY	149.64		COPPER	25
	ARSENIC	31.07		ANTIMONY	25
CONSTANTS:				ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10		
LN2=.69315					

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0145:36

RF   PB   0303L-1

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1856:09   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   301 SEC   VOLUME   UG   8548.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                        NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

     994   8   5   9   7   15   11   6
    1001   16   12   20   9   6   6   11
    1008   12   15   11   9   9   13   11
    1015   11   7   7   22   30   28   21
    1022   23   48   46   43   29   20   18
    1029   13   23   11   13   10   5   5
    1036   9   7   9   9   7   8   12
    1043   10   8   7   12   11   11   10
PERCENT COPPER   .0024
    % RSD COUNTING   10.2
    1102   16   12   12   11   17   12   13
    1109   24   8   9   11   13   13   16
    1116   19   14   19   19   31   30   20
    1123   28   33   47   157   437   952   1578
    1130   1946   1597   866   356   90   24   6
    1137   4   4   3   2   4   3   5
    1144   3   2   3   2   4   2   1
    1151   2   4   3   3   4   3   3
PERCENT ANTIMONY   .1309
    % RSD COUNTING   1.1
    1286   3   3   1   2   2   7   7
    1293   5   10   6   5   4   2   4
    1300   3   3   3   3   2   2   3
    1307   4   2   1   0   2   3   1
    1314   6   5   4   3   2   0   4
    1321   4   1   5   4   2   2   0
    1328   2   0   1   5   2   2   2
    1335   1   2   6   1   1   1   2
PERCENT ARSENIC   .0004
    % RSD COUNTING   128.4
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1314   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   3JAN80 0147:29

RF   PB   0303L-2

SAMPLE TIME	2JAN80 1033:00	LOCATION AFFRI
ACQUISITION TIME	2JAN80 1901:23	TYPE 7.5MIN.
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 301 SEC		VOLUME UG 8622.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

996	13	23	8	5	9	15	11
1003	10	8	8	8	16	10	8
1010	12	23	19	12	7	12	16
1017	15	11	11	16	23	29	36
1024	39	37	31	29	14	16	11
1031	10	8	4	12	12	9	6
1038	9	10	8	6	9	8	11
1045	12	1	16	9	12	8	10

PERCENT COPPER   .0020
% RSD COUNTING   12.1

1102	11	8	10	8	8	21	5
1109	7	18	13	10	11	13	16
1116	6	11	29	29	26	37	20
1123	23	27	46	147	388	929	1528
1130	1858	1570	900	365	91	18	6
1137	2	3	2	4	3	4	3
1144	3	0	2	2	2	6	8
1151	1	3	5	5	2	2	4

PERCENT ANTIMONY   .1266
% RSD COUNTING   1.1

1287	3	2	2	5	2	1	7
1294	10	6	3	3	1	5	4
1301	1	4	3	4	0	2	4
1308	3	3	2	3	4	5	0
1315	5	3	6	6	2	1	1
1322	2	1	5	4	3	2	0
1329	2	0	2	3	0	3	1
1336	2	0	2	3	2	3	3

PERCENT ARSENIC   .0008
% RSD COUNTING   74.1

CENTROID CHANNEL	COPPER	1024	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0149:23

RF   PB   Q303L-3

```
SAMPLE TIME             2JAN80 1033:00    LOCATION    AFFRI
ACQUISITION TIME        2JAN80 1906:38    TYPE        7.5MIN.
PRESET TIME     300 SEC                   GEOMETRY    SHELF 1      0.250
ELAPSED TIME    302 SEC                   VOLUME      UG       9368.000
LIVE TIME       300 SEC                   DETECTOR    GELI 15


CALIBRATION DATE        5OCT79 1357:49    KEV/CH          0.500
                                          OFFSET          0.543


                    NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000            SLOPE          0.500 E-3
SENSITIVITY       16    B =   10.000            OFFSET         4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00


   995      23      11      11        14      10      15      18
  1002       8      10      13        16      16      15      11
  1009       5      13      13        10      11      12      13
  1016      12      16      18        30      35      39      33
  1023      43      48      44        40      34      28      15
  1030      15       9      13        13       7      13      19
  1037      15      21      15        17      11      11      10
  1044       8      18      10        13       5      17       8
```

PERCENT COPPER: .0026

```
   % RSD COUNTING      9.4
  1102       7      13      12         6      12      18      13
  1109      11      15      15        10      13      13      18
  1116      18      16      28        16      26      28      31
  1123      22      28      70       180     476    1075    1753
  1130    2077    1745     985       428     107      15       5
  1137       9       4       8         3       8       5       2
  1144       2       3       3         3       3       6       2
  1151       4       3       6         3       3       1       4
```

PERCENT ANTIMONY: .1322

```
   % RSD COUNTING      1.0
  1287       2       4       3         9       4       3      11
  1294       5       6       6         1       9       3       1
  1301       2       1       2         3       1       2       5
  1308       4       3       0         2       7       4       2
  1315       5       5       3         5       4       1       4
  1322       3       0       3         4       4       1       3
  1329       4       3       3         1       1       2       3
  1336       2       4       2         3       3       3       3
```

PERCENT ARSENIC: .0011

```
   % RSD COUNTING     51.5
CENTROID CHANNEL COPPER       1023    HALF-LIFE CU-64      768 MIN.
                 ANTIMONY     1130              SB-122    4043 MIN.
                 ARSENIC      1315              AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER     257.02    BACKGROUND SPACING:
                 ANTIMONY   149.64       COPPER    25
                 ARSENIC     31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0151:16

RF                    PB                   0303M-1

SAMPLE TIME           2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME      2JAN80 1911:53   TYPE       7.5MIN.
PRESET TIME     300 SEC                GEOMETRY   SHELF 1        0.250
ELAPSED TIME    300 SEC                VOLUME     UG          8051.000
LIVE TIME       300 SEC                DETECTOR   GELI 15

CALIBRATION DATE      5OCT79 1357:49   KEV/CH          0.500
                                       OFFSET          0.543

                      NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2.000      SLOPE         0.500 E-3
SENSITIVITY     16   B =   10.000      OFFSET        4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

   995      2        6       9       7       3       6       7
  1002      4        5       7       5       6       6       6
  1009      2        7       5       4       4       7       5
  1016      8        7       8      10      13      16      21
  1023     26       33      28      11      11       6      11
  1030      6        5       5       7       4       4       4
  1037      5        7      10       3       5       8       5
  1044     10        1       6       5       6       9       7
PERCENT COPPER                       .0015
   % RSD COUNTING     13.4
  1102      4        7       6       4       5       4      11
  1109      6        6       1       8       8       6       8
  1116      6        7       8      14      14      10      10
  1123      9        7      17      62     172     366     645
  1130    761      657     363     144      41      11       4
  1137      3        2       2       1       2       3       3
  1144      3        3       2       3       1       2       1
  1151      2        1       2       3       0       1       3
PERCENT ANTIMONY                     .0559
   % RSD COUNTING      1.8
  1286      2        1       2       2       5       2       4
  1293      3        2       4       2       2       4       1
  1300      2        3       3       1       0       2       1
  1307      0        0       1       1       4       1       4
  1314      1        2       2       4       2       3       0
  1321      3        4       2       1       4       1       2
  1328      2        1       2       3       2       3       1
  1335      1        2       2       1       2       5       3
PERCENT ARSENIC                      .0004
   % RSD COUNTING    119.0
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1130             SB-122  4043 MIN.
                 ARSENIC       1314             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      257.02   BACKGROUND SPACING:
                 ANTIMONY    149.64      COPPER    25
                 ARSENIC      31.07      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0153:10

RF                        PB                        0303M-2

SAMPLE TIME               2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME          2JAN80 1917:07    TYPE       7.5MIN.
PRESET TIME      300 SEC                    GEOMETRY   SHELF 1        0.250
ELAPSED TIME     301 SEC                    VOLUME     UG           9682.000
LIVE TIME        300 SEC                    DETECTOR   GELI 15

CALIBRATION DATE          5OCT79 1357:49    KEV/CH          0.500
                                            OFFSET          0.543

                    NORMALIZATION CONSTANTS      GAMMA
FWHM                5    A =    2.000        SLOPE           0.500 E-3
SENSITIVITY        16    B =   10.000        OFFSET          4.500
LIBRARY NUMBER      1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO     8    ABUNDANCE LIMIT (%)  80.00

    996        8        8        8        6       10       11        3
   1003       12        5        8       10        6        8        9
   1010        7        5        8        3        5        7        6
   1017        4        7        9        9       19       25       26
   1024       32       17       30       14       15       11        7
   1031       10        4       11        7        8        6        6
   1038        6        8        9        4        6        7        4
   1045        5        9        3        6        3        8        7
PERCENT  COPPER                         .0014
   % RSD COUNTING      12.7
   1102        5       12        9        5        7        9       11
   1109        7        5        7        4       11        6        3
   1116       10        8       12        7        6       13       15
   1123       10       17       29       78      205      442      767
   1130      957      807      501      190       45        7        4
   1137        2        7        4        3        2        1        2
   1144        3        1        5        0        4        2        5
   1151        2        3        3        3        5        3        1
PERCENT  ANTIMONY                       .0578
   % RSD COUNTING       1.6
   1286        0        0        1        0        4        3        3
   1293        0        0        5        0        3        3        3
   1300        1        1        0        0        5        2        0
   1307        3        3        3        4        1        2        4
   1314        0        3        5        4        0        0        2
   1321        0        5        0        3        2        0        1
   1328        2        4        3        1        2        4        3
   1335        2        7        1        8        5        3        3
PERCENT  ARSENIC                        .0005
   % RSD COUNTING      78.2
CENTROID CHANNEL COPPER       1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1130              SB-122   4043 MIN.
                 ARSENIC      1314              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02    BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER    25
                 ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0155:03

RF                    PB                        Q303M-3

SAMPLE TIME             2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME        2JAN80 1922:21   TYPE       7.5MIN.
PRESET TIME     300 SEC                  GEOMETRY   SHELF 1        0.250
ELAPSED TIME    300 SEC                  VOLUME     UG          7985.000
LIVE TIME       300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH          0.500
                                         OFFSET          0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =     2.000       SLOPE           0.500 E-3
SENSITIVITY     16   B =    10.000       OFFSET          4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE        1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)    80.00

   996        2        5        3       12        4        4        9
  1003        7        5        6        6        8        5       12
  1010        2        4        6        5        4        6       13
  1017        9        4        4       13       16       25       30
  1024       28       22       27       14       13        5        9
  1031       12        7        5        4        3        4        3
  1038        3        8       11        7        2        8       10
  1045        8        3        7        4        7        7        6
PERCENT  COPPER                      .0019
   % RSD COUNTING      11.8
  1102       10        9        6        5        9        6        6
  1109        5        8        9        7        4        9        2
  1116        9        8        9       11       13       15        7
  1123       11       12       26       72      160      385      701
  1130      818      744      415      166       36       12        1
  1137        3        2        1        3        3        1        3
  1144        4        1        3        0        3        3        4
  1151        1        1        3        2        3        2        2
PERCENT  ANTIMONY                    .0615
   % RSD COUNTING       1.7
  1288        2        2        0        0        2        1        0
  1295        2        2        2        1        1        6        0
  1302        5        1        4        3        1        3        0
  1309        0        0        0        0        1        2        5
  1316        2        1        2        6        2        1        3
  1323        3        1        5        3        4        2        3
  1330        5        1        5        2        0        1        2
  1337        2        1        2        2        3        4        1
PERCENT  ARSENIC                     .0000
   % RSD COUNTING     762.3
CENTROID CHANNEL COPPER       1024   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1130             SB-122   4043 MIN.
                 ARSENIC      1316             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64      COPPER    25
                 ARSENIC     31.07      ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   3JAN80 0156:57

RF   PB   Q303N-1

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI	
ACQUISITION TIME	2JAN80 1927:35	TYPE	7.5MIN.	
PRESET TIME	300 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	301 SEC	VOLUME	UG	9389.000
LIVE TIME	300 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	13	4	10	16	7	5	14
1002	10	11	12	14	13	12	9
1009	9	8	10	10	13	11	11
1016	9	8	11	19	21	30	41
1023	48	48	44	35	15	20	11
1030	20	10	11	11	15	11	9
1037	9	10	5	7	8	7	7
1044	11	16	9	13	6	3	5

PERCENT COPPER   .0028
   % RSD COUNTING   8.4

1102	10	20	13	12	10	5	15
1109	15	21	15	13	15	9	7
1116	8	16	15	18	19	24	17
1123	21	24	55	129	381	851	1492
1130	1794	1467	849	341	100	20	8
1137	5	2	3	3	2	5	2
1144	3	3	1	6	2	1	2
1151	3	0	1	3	3	5	3

PERCENT ANTIMONY   .1111
   % RSD COUNTING   1.1

1287	3	3	2	3	5	4	4
1294	7	4	4	4	4	2	2
1301	4	1	3	1	3	1	6
1308	2	3	2	1	4	1	1
1315	4	6	5	3	1	2	0
1322	0	2	1	3	4	5	3
1329	2	3	1	3	2	3	3
1336	5	1	5	2	4	3	5

PERCENT ARSENIC   .0003
   % RSD COUNTING   179.8

CENTROID CHANNEL COPPER	1023	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1130	SB-122	4043 MIN.
ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	257.02	BACKGROUND SPACING:	
ANTIMONY	149.64	COPPER	25
ARSENIC	31.07	ANTIMONY	25

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   2JAN80 0158:51

RF   PB   Q303N-2

```
SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 1932:49    TYPE       7.5MIN.
PRESET TIME     300 SEC                   GEOMETRY   SHELF 1      0.250
ELAPSED TIME    302 SEC                   VOLUME     UG      11548.000
LIVE TIME       300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH          0.500
                                          OFFSET          0.543

                    NORMALIZATION CONSTANTS     GAMMA
FWHM              5    A =     2.000       SLOPE           0.500 E-3
SENSITIVITY     16    B =    10.000       OFFSET          4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00
```

995	7	19	8	12	15	14	15
1002	18	17	21	15	17	17	16
1009	16	12	15	12	9	15	16
1016	7	18	20	20	26	34	45
1023	54	36	53	45	19	14	14
1030	16	18	9	14	12	9	9
1037	15	11	11	11	12	13	15
1044	12	12	17	12	8	6	7

PERCENT COPPER   .0023
% RSD COUNTING   9.2

1102	17	19	10	12	13	12	13
1109	10	11	16	12	15	13	14
1116	19	18	30	36	38	30	23
1123	26	34	66	179	484	1061	1893
1130	2256	1872	1112	393	103	27	3
1137	6	1	4	3	4	4	3
1144	2	4	4	4	2	2	2
1151	1	5	3	1	2	2	3

PERCENT ANTIMONY   .1145
% RSD COUNTING   1.0

1284	5	4	1	4	3	2	3
1291	3	4	8	7	4	3	3
1298	1	1	3	6	3	5	1
1305	.5	3	4	3	7	2	5
1312	1	3	5	4	3	3	3
1319	4	3	3	2	3	4	4
1326	1	2	2	1	2	2	1
1333	2	0	1	4	3	4	5

PERCENT ARSENIC   .0002
% RSD COUNTING   181.4

```
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY    1130             SB-122   4043 MIN.
                 ARSENIC     1312             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER    257.02   BACKGROUND SPACING:
                 ANTIMONY  149.64      COPPER    25
                 ARSENIC    31.07      ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0200:44

RF                      PB                          Q303N-3

SAMPLE TIME             2JAN80 1033:00    LOCATION    AFFRI
ACQUISITION TIME        2JAN80 1938:04    TYPE        7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY    SHELF 1      0.250
ELAPSED TIME     301 SEC                  VOLUME      UG        8647.000
LIVE TIME        300 SEC                  DETECTOR    GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH         0.500
                                          OFFSET         0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM               5   A =    2.000        SLOPE        0.500 E-3
SENSITIVITY       16   B =   10.000        OFFSET       4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%)  80.00

      995       6       11        9       10       19       13        5
     1002      11        6        9        8        4       23        7
     1009       9       11        6        5       15        9       15
     1016       9        8        8       19       17       28       40
     1023      50       30       35       28       11       19       15
     1030      13        8        8       11        8       11       11
     1037       7       15       10        9        9       15        5
     1044      10        9       10       15        7       15       15
PERCENT COPPER                          .0020
  % RSD COUNTING       12.5
     1102      15        8       11        7        8       12       14
     1109       8       12       11        9       11       12       15
     1116      13       14       18       20       25       23       20
     1123      22       28       60      103      357      897     1502
     1130    1699     1475      836      342       81       27        7
     1137       2        6        5        5        3        4        2
     1144       3        5        6        2        1        3        4
     1151       3        1        5        2        4        1        4
PERCENT ANTIMONY                        .1199
  % RSD COUNTING        1.1
     1288       2        2        4        1        2       11       12
     1295       5        1        1        2        3        1        3
     1302       2        1        2        3        0        0        3
     1309       4        3        1        3        2        3        3
     1316       8        2        2        7        1        2        4
     1323       3        3        4        3        2        3        4
     1330       5        2        0        7        4        2        4
     1337       5        2        2        3        3        2        8
PERCENT ARSENIC                         .0010
  % RSD COUNTING       60.2
CENTROID CHANNEL COPPER       1023    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1130              SB-122   4043 MIN.
                 ARSENIC      1316              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     257.02    BACKGROUND SPACING:
                 ANTIMONY   149.64       COPPER    25
                 ARSENIC     31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
  E=2.7183                            BACKGROUND CHANNELS 10
  LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    2JAN80 0202:38

RF                      PB                      Q3030-1

SAMPLE TIME             2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME        2JAN80 1943:18   TYPE       7.5MIN.
PRESET TIME    300 SEC                   GEOMETRY   SHELF 1      0.250
ELAPSED TIME   303 SEC                   VOLUME     UG      11964.000
LIVE TIME      300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH        0.500
                                         OFFSET        0.543

                        NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000     SLOPE         0.500 E-3
SENSITIVITY       16    B =   10.000     OFFSET        4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    996       22       37       29       30       28       28       24
   1003       31       31       37       33       22       20       18
   1010       25       35       31       24       16       23       36
   1017       32       34       39       38       53       86       82
   1024       94       71       57       49       40       24       26
   1031       20       23       20       22       31       17       21
   1038       20       23       32       14       26       19       28
   1045       31       30       22       31       20       19       23
PERCENT COPPER                        .0032
   % RSD COUNTING        8.5
   1102       27       27       25       29       34       25       23
   1109       36       26       24       18       19       23       34
   1116       31       31       35       31       44       40       28
   1123       58       56      164      367     1074     2504     4112
   1130     4751     4058     2226      872      244       42       14
   1137       11        6        5       12        9        7       12
   1144        7        9        5        9        7        1        8
   1151        3        8        3        7        7        6        5
PERCENT ANTIMONY                      .2392
   % RSD COUNTING        .7
   1286        6        7        3        3        9       11        7
   1293       10       17        7       10        4        2        5
   1300        2        4        9        7        5        6        5
   1307        3        7        3        3        5        8        0
   1314        3        8        1        5        3        5        4
   1321        4        7        3        6        2        4        8
   1328        6        3        5        7        4        9        7
   1335        7        5        5        4        2        4        4
PERCENT ARSENIC                      -.0005
   % RSD COUNTING    -105.5
CENTROID CHANNEL COPPER      1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY    1130              SB-122   4043 MIN.
                 ARSENIC     1314              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER    257.02    BACKGROUND SPACING:
                 ANTIMONY  149.64        COPPER    25
                 ARSENIC    31.07        ANTIMONY  25
CONSTANTS:                              ARSENIC   10
    E=2.7183                        BACKGROUND CHANNELS 10
    LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0204:32

RF   PB   Q3030-2

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 1948:35   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   302 SEC   VOLUME   UG   8275.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                        NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

   995   13   18   21   20   25   20   21
  1002   15   12   12   24   16   16   22
  1009   15   16   15   17   23   18   20
  1016   23   17   15   28   39   38   49
  1023   54   73   63   42   29   26   18
  1030   24   24   16   10   14   24   15
  1037   9   16   19   15   17   17   13
  1044   20   17   15   9   12   15   18
PERCENT COPPER   .0036
   % RSD COUNTING   9.2
  1102   23   25   19   17   19   22   18
  1109   25   13   20   23   24   23   25
  1116   16   26   30   18   25   41   32
  1123   40   57   112   281   742   1767   2980
  1130   3453   2883   1620   603   187   42   11
  1137   9   4   4   3   3   9   6
  1144   10   1   6   5   5   3   3
  1151   2   3   8   1   8   5   7
PERCENT ANTIMONY   .2480
   % RSD COUNTING   .8
  1286   3   4   4   5   5   1   10
  1293   8   15   5   4   4   1   5
  1300   2   6   3   5   6   6   1
  1307   1   4   5   2   5   5   2
  1314   0   3   5   5   5   3   4
  1321   3   2   6   1   2   3   2
  1328   1   6   6   4   5   6   3
  1335   2   6   3   7   2   3   3
PERCENT ARSENIC   .0000
   % RSD COUNTING   1407.1
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1314   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02 BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   2JAN80 0206:25

RF   PB   03030-3

```
SAMPLE TIME           2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME      2JAN80 1953:51    TYPE       7.5MIN.
PRESET TIME      300 SEC                GEOMETRY   SHELF 1        0.250
ELAPSED TIME     303 SEC                VOLUME     UG         10692.000
LIVE TIME        300 SEC                DETECTOR   GELI 15

CALIBRATION DATE      5OCT79 1357:49    KEV/CH         0.500
                                        OFFSET         0.543

                      NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000     SLOPE          0.500 E-3
SENSITIVITY     16    B =   10.000     OFFSET         4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

   996       24       19       27       17       20       27       20
  1003       31       23       27       32       27       23       23
  1010       24       22       24       38       17       24       20
  1017       29       32       48       39       60       66       77
  1024       82       83       40       62       34       28       22
  1031       24       22       24       24       22       21       28
  1038       22       19       21       24       27       20       22
  1045       31       20       22       29       22       23       24
```

PERCENT COPPER   .0037
```
   % RSD COUNTING        8.1
  1102       24       30       20       32       24       29       35
  1109       21       33       34       34       33       30       21
  1116       30       33       21       37       28       54       47
  1123       63       79      127      360     1086     2444     4155
  1130     4796     3924     2214      858      240       43       16
  1137        5        5        3       10        2        8       10
  1144        6        5        8        5        5       10        3
  1151       10        6        9        9        5        6       10
```

PERCENT ANTIMONY   .2664
```
   % RSD COUNTING        .7
  1288        4        8        5        5        8       13       17
  1295        4        9        8        4       10        2        6
  1302        6        6        5        3        6        5        7
  1309        4        2        4        4        0        2        7
  1316        4        9        3        7        6        3        3
  1323        4        3        4        4        3        2        5
  1330        3        4        3        3        4        2        5
  1337        4        2        3        4        4        4        2
```

PERCENT ARSENIC   .0002
```
   % RSD COUNTING      301.3
CENTROID CHANNEL COPPER        1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130              SB-122   4043 MIN.
                 ARSENIC       1316              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02    BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER     25
                 ARSENIC      31.07       ANTIMONY   25
CONSTANTS:                                ARSENIC    10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0208:19

RF                    PB                    0304A-1

SAMPLE TIME           2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME      2JAN80 1959:08    TYPE       7.5MIN.
PRESET TIME     300 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME    300 SEC                 VOLUME     UG       10531.000
LIVE TIME       300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE      5OCT79 1357:49    KEV/CH        0.500
                                        OFFSET        0.543

                       NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000      SLOPE         0.500 E-3
SENSITIVITY     16    B =   10.000      OFFSET        4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    995      5        7        9        4        5        6        7
   1002      5        8        4        8        4        7        6
   1009      3        4        2        3        4        0        2
   1016      5        6        5       13       16       23       33
   1023     33       42       32       31       16       14        6
   1030      8        8        5        7        3       10        5
   1037      4        7        5        5        9        7        8
   1044      5        1        4        1        4        3        2
PERCENT COPPER                              .0022
   % RSD COUNTING        8.7
   1102      3        1        4        3        5        4        5
   1109      5        8       10        4        8        2        4
   1116      4        1        2       12        3        7        9
   1123      7        9       20       42      110      281      484
   1130    592      471      301      114       42        9        3
   1137      3        3        2        3        4        4        1
   1144      2        2        2        1        1        6        3
   1151      4        3        2        2        1        2        3
PERCENT ANTIMONY                           .0326
   % RSD COUNTING        2.0
   1288      3        0        5        2        3        2        2
   1295      4        3        1        2        1        3        1
   1302      4        2        1        4        4        0        2
   1309      0        2        2        0        2        3        5
   1316      3        1        6        2        2        1        2
   1323      7        1        0        2        1        1        4
   1330      1        2        1        1        2        1        7
   1337      1        2        2        2        4        5        1
PERCENT ARSENIC                            .0008
   % RSD COUNTING       53.3
CENTROID CHANNEL COPPER      1023    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY    1130              SB-122   4043 MIN.
                 ARSENIC     1316              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64       COPPER    25
                 ARSENIC     31.07       ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0210:12

RF   PB   Q304A-2

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2004:22   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   300 SEC   VOLUME   UG   8952.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

    996   3   5   4   6   6   4   2
   1003   0   2   2   1   6   5   5
   1010   1   5   7   4   3   4   5
   1017   4   7   17   11   18   28   30
   1024   27   29   23   13   12   9   7
   1031   3   3   4   0   2   5   4
   1038   6   1   3   3   5   3   1
   1045   3   3   3   3   5   5   3
PERCENT COPPER   .0020
   % RSD COUNTING   10.2
   1102   8   7   5   3   5   4   5
   1109   4   3   3   6   4   3   2
   1116   4   6   2   2   4   4   4
   1123   7   2   12   38   114   226   377
   1130   478   367   219   89   15   11   3
   1137   3   0   0   0   2   0   0
   1144   1   1   2   0   5   2   0
   1151   4   1   1   4   1   2   3
PERCENT ANTIMONY   .0304
   % RSD COUNTING   2.3
   1287   3   1   1   2   3   1   3
   1294   2   4   3   5   1   3   2
   1301   3   1   2   2   0   0   3
   1308   6   1   1   0   2   1   3
   1315   2   1   1   3   0   1   2
   1322   3   3   2   3   0   0   1
   1329   1   1   1   2   0   2   2
   1336   2   2   2   0   1   2   5
PERCENT ARSENIC   .0002
   % RSD COUNTING   193.9
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   2JAN80 0215:53

RF                      PB                      Q304B-2

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2020:04    TYPE       7.5MIN.
PRESET TIME     300 SEC                   GEOMETRY   SHELF 1        0.250
ELAPSED TIME    300 SEC                   VOLUME     UG       11674.000
LIVE TIME       300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH          0.500
                                          OFFSET          0.543

                        NORMALIZATION CONSTANTS     GAMMA
FWHM               5    A =     2.000          SLOPE       0.500 E-3
SENSITIVITY       16    B =    10.000          OFFSET      4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

   996        1        9        7        6        4        7        8
  1002        6        8        1        4        2        7        3
  1010        6        3        6        8        4        5        9
  1017       10        7       11       14       19       37       50
  1024       44       42       29       25       13        5        4
  1031        8        4        8        5        2        6        5
  1038        3        4        5        7        3        4        2
  1045        3        7        5        4        3        6        4
PERCENT  COPPER                      .0023
   % RSD COUNTING       8.1
  1102        7        3        8        4        4        4        7
  1109        4        0        7        3        8        5        4
  1116        5        7        9        3        5        3        5
  1123        6       13       22       41      117      321      519
  1130      624      490      264      112       34        5        2
  1137        1        3        1        2        0        3        2
  1144        5        4        4        3        0        1        2
  1151        0        4        2        1        4        2        1
PERCENT  ANTIMONY                    .0307
   % RSD COUNTING       2.0
  1287        1        4        4        4        3        2        1
  1294        7        3        2        1        4        0        8
  1301        2        4        1        0        0        4        3
  1308        0        1        0        1        1        2        1
  1315        2        3        2        4        1        1        0
  1322        0        0        1        2        2        3        1
  1329        2        1        1        3        0        4        1
  1336        3        3        2        2        2        3        1
PERCENT  ARSENIC                     .0002
   % RSD COUNTING     134.6
CENTROID CHANNEL  COPPER        1024    HALF-LIFE CU-64     768 MIN.
                  ANTIMONY      1130              SB-122   4043 MIN.
                  ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM  COPPER      257.02    BACKGROUND SPACING:
                  ANTIMONY    149.64       COPPER    25
                  ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0217:47

RF   FB   Q304B-3

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2025:18   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   300 SEC   VOLUME   UG   10393.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

    996   5   6   5   6   5   8   6
   1003   0   4   2   4   6   5   6
   1010   9   6   3   6   3   1   6
   1017   12   4   9   8   29   24   40
   1024   29   32   23   16   12   9   1
   1031   4   5   5   3   3   5   0
   1038   4   3   3   3   4   4   1
   1045   1   5   4   4   5   5   6
PERCENT COPPER   .0019
    % RSD COUNTING   9.7
   1102   6   2   7   3   3   1   5
   1109   2   3   3   4   3   7   2
   1116   7   5   2   3   3   4   5
   1123   7   6   13   44   114   248   425
   1130   479   407   257   98   27   6   3
   1137   2   1   1   1   2   2   0
   1144   2   1   2   2   3   2   2
   1151   0   2   4   0   1   1   2
PERCENT ANTIMONY   .0286
    % RSD COUNTING   2.2
   1286   1   1   0   0   2   0   7
   1293   1   3   2   1   1   3   0
   1300   5   3   1   2   3   1   1
   1307   2   0   1   1   2   2   1
   1314   2   1   1   1   0   1   1
   1321   1   2   1   3   0   0   1
   1328   2   1   1   1   1   1   3
   1335   1   0   1   1   1   2   6
PERCENT ARSENIC   .0000
    % RSD COUNTING   2224.8
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1314   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0212:06

RF                      PB                      Q304A-3

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2009:36    TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME     300 SEC                  VOLUME     UG       10547.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH        0.500
                                          OFFSET        0.543

                    NORMALIZATION CONSTANTS     GAMMA
FWHM               5    A =    2.000       SLOPE        0.500 E-3
SENSITIVITY       16    B =   10.000       OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)   80.00

     996        6        6        3        7        8        5        3
    1003        8        4        0        4        2        6        6
    1010        6        0        1        5        4        3        5
    1017        6        7       11        9       14       36       25
    1024       28       44       17       18       15        5        5
    1031        3        2        5        6        3        6        9
    1038        1        3        5        6        6        3        8
    1045        1        6        2        5        7        4        3
PERCENT COPPER                         .0018
    % RSD COUNTING      10.0
    1102        4        1        5        4        5        3        5
    1109        3        4        2        2        3        6        5
    1116        2       11        3        3        7        4        5
    1123        8        9       18       42      123      253      458
    1130      536      438      266      105       27        9        5
    1137        0        2        2        2        2        1        1
    1144        4        2        4        1        1        3        0
    1151        1        1        3        1        0        2        1
PERCENT ANTIMONY                       .0302
    % RSD COUNTING       2.1
    1287        1        0        1        1        1        4        4
    1294        3        2        2        4        2        1        2
    1301        3        0        0        0        2        3        2
    1308        0        2        1        1        2        4        2
    1315        1        1        2        2        2        3        0
    1322        1        0        3        2        2        0        2
    1329        1        1        1        2        4        1        1
    1336        3        1        2        3        4        2        0
PERCENT ARSENIC                        .0003
    % RSD COUNTING     116.1
CENTROID CHANNEL COPPER        1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02    BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER    25
                 ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    2JAN80 0213:59

RF                      PB                      Q304B-1

SAMPLE TIME             2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2014:50   TYPE       7.5MIN.
PRESET TIME     300 SEC                  GEOMETRY   SHELF 1       0.250
ELAPSED TIME    300 SEC                  VOLUME     UG      12928.000
LIVE TIME       300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH         0.500
                                         OFFSET         0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000       SLOPE          0.500 E-3
SENSITIVITY     16    B =   10.000       OFFSET         4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    996         6         5         6         4         4         1         7
   1003         7         5         3         3         4         7         3
   1010         1         4         8         5         5         4         3
   1017         6        12        12        26        22        38        42
   1024        44        54        29        27        11        17         8
   1031         7         6         4         8         5         4         5
   1038         7         9         5         4         4         8         6
   1045         6         2         5         5         2         3         2
PERCENT COPPER                              .0023
   % RSD COUNTING        7.2
   1102         7         7         5         5         7        10         6
   1109         6         5         5         3         8         5         7
   1116         4         7         5         7         6         6         8
   1123        11        15        27        47       155       358       598
   1130       706       593       324       166        36         5         3
   1137         1         2         2         2         5         3         1
   1144         4         4         1         2         2         0         5
   1151         0         0         2         0         1         5         5
PERCENT ANTIMONY                            .0327
   % RSD COUNTING        1.8
   1288         1         2         0         3         3         3         5
   1295         1         2         1         4         1         2         5
   1302         2         5         4         0         3         0         3
   1309         0         1         2         0         3         2         1
   1316         1         2         1         4         2         3         1
   1323         2         0         3         1         1         2         1
   1330         2         0         3         3         2         4         2
   1337         3         6         1         3         5         4         0
PERCENT ARSENIC                             .0001
   % RSD COUNTING      242.3
CENTROID CHANNEL COPPER       1024   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1130             SB-122   4043 MIN.
                 ARSENIC      1316             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02   BACKGROUND SPACING:
                 ANTIMONY    149.64      COPPER    25
                 ARSENIC      31.07      ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    2JAN80 0219:40

RF                     PB                    Q304C-1

SAMPLE TIME            2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME       2JAN80 2030:32    TYPE       7.5MIN.
PRESET TIME     300 SEC                  GEOMETRY   SHELF 1        0.250
ELAPSED TIME    301 SEC                  VOLUME     UG        11510.000
LIVE TIME       300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE       5OCT79 1357:49    KEV/CH         0.500
                                         OFFSET         0.543

                       NORMALIZATION CONSTANTS    GAMMA
FWHM               5   A =     2.000             SLOPE      0.500 E-3
SENSITIVITY       16   B =    10.000             OFFSET     4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%)  80.00

    996       13        14        12        12        13        10        14
   1003       11        10        12         8        14        12        15
   1010       11        12        10         7        14        10        14
   1017        9        18        23        31        39        40        51
   1024       42        44        37        32        32        15        14
   1031       15        10        11        14        13        15        15
   1038        6        13        13        15        14         9         8
   1045        4        13        19        15        10        12        11
PERCENT  COPPER                          .0022
   % RSD COUNTING       9.9
   1102       15        12        15        20        12        16         9
   1109       11         9        13        11        17        23        18
   1116       11        10        25        29        29        30        25
   1123       34        32        51       146       453      1065      1782
   1130     2140      1847      1012       404       109        23         6
   1137        4         2         4         6         5         6         3
   1144        2         3         5         5         1         3         6
   1151        4         3         5         4         1         4         5
PERCENT  ANTIMONY                        .1111
   % RSD COUNTING       1.0
   1286        2         2         1         5         5         3         5
   1293        6         6         8        12         3         2         3
   1300        1         4         1         1         1         3         3
   1307        3         2         0         0         2         3         0
   1314        1         7         8         1         1         1         3
   1321        3         5         0         3         3         2         2
   1328        1         1.        4         6         1         2         5
   1335        1         6         3         2         2         0         3
PERCENT  ARSENIC                         .0004
   % RSD COUNTING      92.6
CENTROID CHANNEL COPPER      1024   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY    1130             SB-122   4043 MIN.
                 ARSENIC     1314             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER    257.02   BACKGROUND SPACING:
                 ANTIMONY  149.64       COPPER    25
                 ARSENIC    31.07       ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   2JAN80 0221:34

RF   PB   Q304C-2

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2035:47   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   301 SEC   VOLUME   UG   10742.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    995   11   10   9   12   16   12   17
   1002   15   7   12   12   12   17   9
   1009   11   8   9   7   11   12   17
   1016   16   11   14   18   28   29   44
   1023   48   39   37   38   23   19   18
   1030   13   11   13   15   8   5   7
   1037   10   10   10   8   11   8   11
   1044   9   14   10   12   15   13   11
PERCENT COPPER   .0022
   % RSD COUNTING   10.4
   1102   15   11   13   13   6   10   11
   1109   13   12   10   16   19   12   11
   1116   19   16   21   22   28   21   21
   1123   26   .   33   43   141   417   1001   1560
   1130   1965   1641   909   359   93   14   8
   1137   1   3   5   2   7   0   5
   1144   5   6   3   3   3   4   4
   1151   7   5   1   5   2   3   3
PERCENT ANTIMONY   .1077
   % RSD COUNTING   1.1
   1287   0   5   3   3   2   2   1
   1294   7   1   1   8   5   4   3
   1301   2   2   0   2   1   1   4
   1308   3   3   5   1   2   1   3
   1315   2   4   8   6   1   2   1
   1322   2   1   5   4   1   5   1
   1329   1   2   6   3   4   2   7
   1336   3   4   4   1   2   5   4
PERCENT ARSENIC   .0007
   % RSD COUNTING   71.1
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                  ANTIMONY   1130   SB-122   4043 MIN.
                  ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                  ANTIMONY   149.64   COPPER   25
                  ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
  E=2.7183   BACKGROUND CHANNELS 10
  LN2=.69315

EXPERIMENT 1   2JAN80 0223:27

RF   PB   0304C-3

SAMPLE TIME	2JAN80 1033:00	LOCATION AFFRI
ACQUISITION TIME	2JAN80 2041:02	TYPE 7.5MIN.
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 301 SEC		VOLUME UG 9114.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

996	7	9	7	10	12	10	10
1003	13	12	7	13	9	9	10
1010	13	12	5	10	11	9	14
1017	9	13	12	13	23	37	34
1024	43	48	25	18	19	13	4
1031	5	5	9	14	10	11	10
1038	5	7	14	7	7	11	10
1045	11	10	9	10	8	16	16

PERCENT COPPER   .0022
   % RSD COUNTING   11.3

1102	11	9	9	17	11	11	16
1109	13	6	10	19	23	11	13
1116	16	17	22	26	27	29	17
1123	16	34	29	112	350	780	1294
1130	1583	1276	744	275	86	16	4
1137	4	3	4	2	4	2	1
1144	6	2	5	3	2	6	7
1151	1	1	5	5	4	0	4

PERCENT ANTIMONY   .1017
   % RSD COUNTING   1.2

1288	1	3	6	6	7	3	4
1295	6	1	3	1	4	4	2
1302	4	3	4	4	3	3	7
1309	2	3	0	2	6	3	3
1316	7	2	0	4	4	6	4
1323	3	3	4	3	2	3	2
1330	2	2	4	4	4	2	5
1337	3	2	5	3	1	2	2

PERCENT ARSENIC   -.0000
   % RSD COUNTING   -3542.6

CENTROID CHANNEL COPPER	1024	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1130	SB-122	4043 MIN.
ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	257.02	BACKGROUND SPACING:	
ANTIMONY	149.64	COPPER 25	
ARSENIC	31.07	ANTIMONY 25	
CONSTANTS		ARSENIC 10	
E=2.7183		BACKGROUND CHANNELS 10	
LN2= 69315			

FBI LAB WASHINGTON DC

EXPERIMENT 1   2JAN80 2259 21

RF   PB   03640-1

```
SAMPLE TIME            2JAN80 1922:00    LOCATION    AFFRI
ACQUISITION TIME       2JAN80 2046:16    TYPE        7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY    SHELF 1      0.250
ELAPSED TIME     301 SEC                  VOLUME      UG       10786.000
LIVE TIME        300 SEC                  DETECTOR    GELI 15

CALIBRATION DATE       5OCT79 1257.49    KEV/CH          0.500
                                         OFFSET          0.543
```

                       NORMALIZATION CONSTANTS   GAMMA
```
SIGMA            5     A -     1.000       SLOPE       0.500 E-3
SENSITIVITY     16     B -    10.000       OFFSET      4.500
LIBRARY NUMBER   1     ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  5     ABUNDANCE LIMIT (%)  80.00
```

```
   998     11      12      11      17       8      15      16
  1001      6      13      10       8      13      13      10
  1010     16      13      10      14      14      13       7
  1017     14      12      12      20      28      28      49
  1024     24      40      32      25      14      14      13
  1031      7      19      16       6       8      16      17
  1038     10      16      13      11       5       9       7
  1045      5      10       4      12      13       6      10
PERCENT  COPPER                   .9820
  % RSD COUNTING      11.0
  1152     12       7      21      15      15      14      16
  1166     13      10      18      11      22      11      12
  1116     23       9      17      42      31      25      23
  1123     26      37      44     148     434     971    1723
  1116   1987    1688     949     381     105      23       4
  1137      4       3       4       4       6       6       5
  1144      7       0       5       3       3       7       3
  1151      4       4       3       4       6       1       1
PERCENT  ANTIMONY                 .1111
  % RSD COUNTING       1.1
  1288      6       0       4       5       5       2      12
  1295      5       4       1       3       6       0       2
  1302      6       2       6       1       2       2       2
  1309      5       3       1       4       4       7       3
  1316      8       3       2       5       2       2       5
  1323      1       5       3       2       0       4       3
  1330      2       2       3       1       2       2       2
  1337      5       3       3       6       4       4       0
PERCENT  ARSENIC                  .0010
  % RSD COUNTING      54.4
```

```
CENTROID CHANNEL COPPER        1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130              SB-122   4043 MIN.
                 ARSENIC       1316              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02    BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER    25
                 ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.71828                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0227:15

RF                      PB                      0304D-2

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2051:31    TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME     301 SEC                  VOLUME     UG       11201.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH        0.500
                                          OFFSET        0.543

                        NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000       SLOPE        0.500 E-3
SENSITIVITY       16    B =   10.000       OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

     996        9        8       14       11       19       15       18
    1003       12       16       10       15       15       12       17
    1010       10       17        9        9       10       18       15
    1017       14       13       13       20       30       32       35
    1024       48       44       22       37       19       14       19
    1031       13       16       13        8       12       13        6
    1038       11       11       10       11       17       12        7
    1045       11       13       13       12       14       14       10
PERCENT  COPPER                          .0019
   % RSD COUNTING      11.7
    1102        9       12       13       11        6        8       18
    1109       19       11       13       11        7       17       14
    1116       17       20       27       16       31       24       34
    1123       25       25       67      148      461     1049     1748
    1130     2155     1731      940      368       94       26        7
    1137        3        2        2        2        3        0        3
    1144        3        1        2        1        0        6        1
    1151        3        2        2        7        6        3        3
PERCENT  ANTIMONY                        .1115
   % RSD COUNTING       1.0
    1286        3        4        4        3        2        4        7
    1293        6       12        7        2        1        1        1
    1300        5        4        5        1        1        1        2
    1307        4        6        2        3        2        3        2
    1314        5        3        6        5        2        1        1
    1321        5        5        2        2        4        2        3
    1328        3        0        2        4        2        1        5
    1335        1        2        2        2        4        8        1
PERCENT  ARSENIC                         .0006
   % RSD COUNTING      77.5
CENTROID CHANNEL COPPER        1024    HALF-LIFE CU-64      768 MIN.
                 ANTIMONY      1130              SB-122    4043 MIN.
                 ARSENIC       1314              AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER      257.02    BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER    25
                 ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   2JAN80 0229:08

RF   FB   0304D-3

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2056:46   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   301 SEC   VOLUME   UG   11569.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

995	11	10	9	16	12	7	15
1002	15	9	12	11	15	8	10
1009	5	10	11	18	15	13	11
1016	12	13	15	15	25	37	44
1023	48	50	56	32	23	17	8
1030	11	9	9	9	9	12	13
1037	11	10	15	9	10	10	14
1044	14	14	10	13	10	8	12

PERCENT COPPER   .0025
   % RSD COUNTING   8.8

1102	13	14	13	14	11	11	21
1109	18	24	17	14	20	10	18
1116	21	13	18	20	28	31	26
1123	23	34	58	163	453	997	1681
1130	2069	1743	994	375	101	10	6
1137	6	4	5	5	3	6	2
1144	3	3	7	4	2	3	6
1151	3	1	3	2	3	4	1

PERCENT ANTIMONY   .1062
   % RSD COUNTING   1.1

1288	2	3	1	3	3	6	2
1295	5	3	2	4	3	2	4
1302	4	1	0	2	2	4	3
1309	3	0	4	0	1	1	2
1316	6	4	4	3	4	1	5
1323	2	2	1	5	0	1	2
1330	2	3	3	2	4	3	2
1337	3	3	2	3	3	4	1

PERCENT ARSENIC   .0005
   % RSD COUNTING   84.5

CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0231:02

RF                    PB                    Q304E-1

SAMPLE TIME            2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME       2JAN80 2102:01   TYPE       7.5MIN.
PRESET TIME     300 SEC                 GEOMETRY   SHELF 1        0.250
ELAPSED TIME    300 SEC                 VOLUME     UG         10370.000
LIVE TIME       300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE       5OCT79 1357:49   KEV/CH          0.500
                                        OFFSET          0.543

                       NORMALIZATION CONSTANTS    GAMMA
FWHM              5     A =    2.000     SLOPE          0.500 E-3
SENSITIVITY     16     B =   10.000     OFFSET         4.500
LIBRARY NUMBER   1     ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8     ABUNDANCE LIMIT (%)  80.00

    995        3         2         5         3        4         3         3
   1002        2         2         3         2        3         5         3
   1009        4         3         3         3        1         2         5
   1016        3         5         9         1       14        17        25
   1023       27        25        33        25       12         8         9
   1030        9         3         3         3        3         0         4
   1037        4         3         3         3        3         1         4
   1044        2         4         6         2        4         3         5
PERCENT  COPPER                                .0018
   % RSD COUNTING        9.8
   1102        3         7         1         5        1         4         4
   1109        1         2         6         2        6         3         5
   1116        5         1         6         3        4         4         5
   1123        7         5        14        29       68       186       302
   1130      338       316       185        67       16         5         3
   1137        1         1         2         1        4         1         0
   1144        1         4         2         2        1         4         1
   1151        0         2         1         2        4         2         1
PERCENT  ANTIMONY                              .0207
   % RSD COUNTING        2.6
   1284        2         3         0         0        1         0         2
   1291        1         0         0         1        3         3         3
   1298        3         1         3         2        1         1         0
   1305        2         0         1         4        4         1         1
   1312        2         2         3         2        2         1         0
   1319        2         1         4         4        3         2         0
   1326        1         3         1         2        1         1         1
   1333        0         2         1         0        1         2         3
PERCENT  ARSENIC                               .0000
   % RSD COUNTING     1816.5
CENTROID CHANNEL COPPER          1023   HALF-LIFE CU-64      768 MIN.
                 ANTIMONY        1130             SB-122    4043 MIN.
                 ARSENIC         1312             AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER         257.02   BACKGROUND SPACING:
                 ANTIMONY       149.64      COPPER    25
                 ARSENIC         31.07      ANTIMONY  25
CONSTANTS:                                  ARSENIC   10
    E=2.7183                        BACKGROUND CHANNELS 10
    LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0232:56

RF                    PB                        0304E-2

SAMPLE TIME           2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME      2JAN80 2107:15   TYPE       7.5MIN.
PRESET TIME    300 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME   300 SEC                 VOLUME     UG       11221.000
LIVE TIME      300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE      5OCT79 1357:49   KEV/CH        0.500
                                       OFFSET        0.543

                   NORMALIZATION CONSTANTS    GAMMA
FWHM            5    A =    2.000       SLOPE        0.500 E-3
SENSITIVITY    16   B =   10.000       OFFSET       4.500
LIBRARY NUMBER  1   ENERGY TOLERANCE    1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)  80.00

    996        6        5        7        6        4        4        4
   1003        7        6        7        3        6        5        1
   1010        4        2        6        5        5        2        5
   1017        5        6        7       12       20       23       24
   1024       27       31       29       13       12       11        2
   1031        3        3        3        0        3        4        3
   1038        4        3        3        0        5        5        1
   1045        1        4        8        2        2        4        4
PERCENT  COPPER                         .0016
   % RSD COUNTING       10.4
   1102        4        3        2        1        3        1        5
   1109        3        5        2        4        2        7        3
   1116        4        2        2        4        5        8        4
   1123        8        8       13       33       78      182      308
   1130      363      299      165       74       15        5        3
   1137        6        4        3        3        2        2        1
   1144        3        1        2        1        1        0        0
   1151        2        1        2        0        3        2        5
PERCENT  ANTIMONY                       .0193
   % RSD COUNTING        2.6
   1286        0        3        2        1        0        1        2
   1293        1        1        2        3        3        4        2
   1300        3        0        1        3        2        0        1
   1307        4        0        2        1        3        4        2
   1314        1        2        2        1        3        3        0
   1321        0        2        2        1        5        0        1
   1328        4        1        2        1        3        1        1
   1335        3        0        1        4        1        1        0
PERCENT  ARSENIC                        .0002
   % RSD COUNTING      167.3
CENTROID CHANNEL COPPER        1024   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1130             SB-122  4043 MIN.
                 ARSENIC       1314             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      257.02   BACKGROUND SPACING:
                 ANTIMONY    149.64      COPPER    25
                 ARSENIC      31.07      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
    E=2.7183                         BACKGROUND CHANNELS 10
    LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0234:49

RF                      PB                      0304E-3

SAMPLE TIME             2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2112:29   TYPE       7.5MIN.
PRESET TIME      300 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME     300 SEC                 VOLUME     UG         9301.000
LIVE TIME        300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH        0.500
                                         OFFSET        0.543

                  NORMALIZATION CONSTANTS    GAMMA
FWHM            5    A =    2.000          SLOPE        0.500 E-3
SENSITIVITY    16    B =   10.000          OFFSET       4.500
LIBRARY NUMBER  1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO 8    ABUNDANCE LIMIT (%)  80.00

    996      3       5       3       5       5       2       5
   1002      4       3       1       3       4       6       2
   1010      1       7       3       7       1       1       5
   1017      7       7      15      10      23      26      27
   1024     32      17      18      11      16       4       1
   1031      6       1       2       1       1       0       2
   1038      3       2       3       4       4       3       3
   1045      2       3       3       3       1       3       4
PERCENT  COPPER                         .0019
   % RSD COUNTING       10.2
   1102      3       0       4       2       2       2       3
   1109      3       3       3       4       5       3       2
   1116      2       2       4       0       7       0       5
   1123      6       3       3      23      64     145     253
   1130    279     244     142      61      16       5       0
   1137      0       0       2       1       0       1       3
   1144      1       0       2       1       1       1       2
   1151      1       1       1       0       6       2       2
PERCENT  ANTIMONY                       .0188
   % RSD COUNTING        2.9
   1285      1       1       1       1       2       2       1
   1292      4       3       1       3       3       2       1
   1299      5       1       1       2       5       1       2
   1306      1       1       0       1       3       1       1
   1313      0       0       1       1       0       1       3
   1320      1       4       2       1       1       1       1
   1327      1       0       0       2       1       1       1
   1334      1       4       0       4       2       1       0
PERCENT  ARSENIC                       -.0006
   % RSD COUNTING      -65.4
CENTROID CHANNEL COPPER      1024    HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1130              SB-122  4043 MIN.
                 ARSENIC     1313              AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER    257.02    BACKGROUND SPACING:
                 ANTIMONY  149.64       COPPER    25
                 ARSENIC    31.07       ANTIMONY  25
CONSTANTS.                              ARSENIC   10
    E=2.7183                         BACKGROUND CHANNELS 10
    LN2=.69315
```

EXPERIMENT 1   2JAN80 0236:43

RF   PB   Q304F-1

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 2117:42	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	301 SEC	VOLUME	UG 7159.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

996	6	6	6	10	6	9	7
1003	9	5	7	8	14	5	9
1010	5	11	5	6	9	14	6
1017	11	12	11	10	17	26	41
1024	20	22	23	15	11	6	10
1031	7	5	6	8	10	5	7
1038	9	13	8	8	8	4	7
1045	14	8	7	8	4	6	10

PERCENT COPPER   .0022

% RSD COUNTING   12.8

1102	8	5	12	8	11	10	6
1109	14	6	6	7	3	12	12
1116	9	15	8	18	26	19	16
1123	16	24	28	90	261	635	1055
1130	1263	1029	608	262	65	15	7
1137	1	1	2	2	2	2	4
1144	1	5	1	3	3	2	3
1151	3	3	1	4	2	2	2

PERCENT ANTIMONY   .1058

% RSD COUNTING   1.4

1286	0	2	1	4	3	5	1
1293	6	3	0	2	1	2	3
1300	1	1	6	3	1	2	2
1307	3	4	1	1	3	2	1
1314	0	2	2	3	1	0	1
1321	5	4	1	1	1	2	3
1328	1	2	1	1	2	2	3
1335	3	0	3	3	3	2	1

PERCENT ARSENIC   -.0003

% RSD COUNTING   -174.0

CENTROID CHANNEL	COPPER	1024	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1314	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0238:36

RF   PB   0304F-2

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2122:56   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   301 SEC   VOLUME   UG   7838.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

   995   7   12   14   3   8   13   3
  1002   6   11   4   9   7   5   9
  1009   11   6   12   9   12   7   10
  1016   7   8   10   22   28   34   29
  1023   41   41   26   26   15   12   18
  1030   13   14   7   1   9   11   6
  1037   8   9   10   10   9   5   7
  1044   8   5   9   7   7   8   8
PERCENT COPPER   .0029
   % RSD COUNTING   10.4
  1102   7   6   10   11   5   11   9
  1109   15   7   9   6   10   10   13
  1116   7   10   15   24   24   19   10
  1123   20   22   41   105   285   741   1151
  1130   1439   1220   686   272   87   12   9
  1137   5   2   4   6   1   4   2
  1144   3   2   3   2   3   3   2
  1151   6   1   3   2   2   5   2
PERCENT ANTIMONY   .1097
   % RSD COUNTING   1.3
  1284   2   3   3   2   1   2   2
  1291   1   6   4   5   4   4   0
  1298   4   1   2   1   2   3   2
  1305   1   5   3   2   4   3   3
  1312   2   2   1   5   2   1   2
  1319   3   0   3   0   1   2   3
  1326   1   1   2   4   2   3   2
  1333   3   2   0   2   0   3   2
PERCENT ARSENIC   .0009
   % RSD COUNTING   63.4
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1312   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY   25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    2JAN80 0240:30

RF                   PB                      Q304F-3

SAMPLE TIME          2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME     2JAN80 2128:10    TYPE       7.5MIN.
PRESET TIME    300 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME   301 SEC                 VOLUME     UG        7980.000
LIVE TIME      300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE     5OCT79 1357:49    KEV/CH         0.500
                                       OFFSET         0.543

                  NORMALIZATION CONSTANTS    GAMMA
FWHM            5    A =    2.000       SLOPE         0.500 E-3
SENSITIVITY   16    B =   10.000       OFFSET        4.500
LIBRARY NUMBER 1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)  80.00

   996        3        9        7       13       10        6        3
  1003        8       11        4       11        6       12        5
  1010        8       14        9       15        5        7        6
  1017        2        4       20       17       20       18       29
  1024       36       31       24       24       15       15        6
  1031        8        6        6       11        5        2        3
  1038       10        8        4        8        8        9        7
  1045        6        6        8       10        9       12        9
PERCENT COPPER                          .0020
   % RSD COUNTING        13.4
  1102        6        8        9       11        9        9        6
  1109        8       10       10        6        8        8        8
  1116        6       16       10       14       15       28       20
  1123       15       17       40      114      298      678     1171
  1130     1405     1166      695      265       79       11        4
  1137        2        0        0        2        2        1        2
  1144        1        0        3        3        2        0        1
  1151        2        2        1        2        0        5        2
PERCENT ANTIMONY                        .1057
   % RSD COUNTING         1.3
  1286        1        3        2        3        2        3        4
  1293        4        5        6        6        1        1        4
  1300        3        5        0        2        0        1        4
  1307        1        1        1        2        3        2        2
  1314        1        0        2        4        3        2        2
  1321        2        2        3        4        1        3        0
  1328        2        1        1        0        1        4        1
  1335        2        2        2        1        0        4        1
PERCENT ARSENIC                         0.0000
CENTROID CHANNEL COPPER        1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130              SB-122   4043 MIN.
                 ARSENIC       1314              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02    BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER    25
                 ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0242:23

RF   PB   Q304G-1

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2133:24   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   300 SEC   VOLUME   UG   11174.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                        NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

   995   6   5   3   6   9   5   7
  1002   7   3   6   3   3   4   6
  1009   9   6   4   8   1   4   2
  1016   9   7   2   13   17   34   33
  1023   37   36   34   31   11   16   6
  1030   7   7   6   3   7   3   3
  1037   1   4   0   3   4   6   2
  1044   4   6   3   7   5   3   6
PERCENT COPPER   .0023
    % RSD COUNTING   8.6
  1102   7   4   2   7   3   7   5
  1109   1   4   0   6   5   5   10
  1116   6   7   2   2   5   7   5
  1123   11   11   18   56   124   290   472
  1130   565   452   266   113   26   2   2
  1137   3   2   4   4   0   3   2
  1144   1   0   1   1   2   0   3
  1151   3   3   3   3   2   1   2
PERCENT ANTIMONY   .0302
    % RSD COUNTING   2.1
  1286   5   0   2   3   1   3   2
  1293   7   2   3   2   2   4   6
  1300   3   0   0   0   4   0   1
  1307   1   3   2   3   6   2   2
  1314   3   4   1   4   4   2   2
  1321   2   3   0   1   4   2   0
  1328   0   4   1   0   2   3   1
  1335   3   1   1   1   2   2   3
PERCENT ARSENIC   .0008
    % RSD COUNTING   49.5
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1314   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   3JAN80 0244:16

RF   PB   Q304G-2

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 2138:38	TYPE	7.5MIN.
PRESET TIME 300 SEC		GEOMETRY	SHELF 1 0.250
ELAPSED TIME 300 SEC		VOLUME	UG 12198.000
LIVE TIME 300 SEC		DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                            OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

996	4	3	5	8	3	6	2
1003	9	5	4	5	8	6	3
1010	3	7	4	5	6	4	8
1017	9	9	7	14	28	34	44
1024	45	45	32	19	16	9	4
1031	5	4	7	5	2	2	6
1038	8	8	5	2	6	3	5
1045	6	3	6	1	6	3	5

PERCENT COPPER   .0025
% RSD COUNTING   7.7

1102	3	5	9	2	1	1	2
1109	0	4	8	8	7	8	6
1116	5	3	3	8	2	7	8
1123	11	10	17	46	103	297	493
1130	599	488	297	98	39	8	1
1137	1	2	1	2	3	1	1
1144	2	5	2	2	5	2	2
1151	1	5	2	0	6	1	2

PERCENT ANTIMONY   .0289
% RSD COUNTING   2.0

1287	1	1	2	1	0	2	0
1294	3	1	0	1	5	2	3
1301	5	5	0	0	2	2	3
1308	1	1	3	1	3	3	3
1315	2	1	3	3	1	3	1
1322	2	3	2	0	1	1	3
1329	2	0	4	0	2	2	2
1336	3	2	3	1	0	3	2

PERCENT ARSENIC   .0005
% RSD COUNTING   64.2

CENTROID CHANNEL COPPER	1024	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1130	SB-122	4043 MIN.
ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	257.02	BACKGROUND SPACING:	
ANTIMONY	149.64	COPPER	25
ARSENIC	31.07	ANTIMONY	25
CONSTANTS:		ARSENIC	10
E=2.7183		BACKGROUND CHANNELS 10	
LN2=.69315			

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0246:10

RF   PB   Q304G-3

```
SAMPLE TIME            2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME       2JAN80 2143:52    TYPE       7. 5MIN.
PRESET TIME     300 SEC                  GEOMETRY   SHELF 1       0. 250
ELAPSED TIME    300 SEC                  VOLUME     UG         10267. 000
LIVE TIME       300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE       5OCT79 1357:49    KEV/CH        0. 500
                                         OFFSET        0. 543


                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2. 000        SLOPE       0. 500 E-3
SENSITIVITY      16   B =   10. 000        OFFSET      4. 500
LIBRARY NUMBER    1   ENERGY TOLERANCE     1. 25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)  80. 00


    995      4        3        2        5        7        5        4
   1002      8        8        5        7        5        4        6
   1009     11        5        7        8        4        3        5
   1016      6        7        5        7       16       30       27
   1023     27       27       26       31       14       14       10
   1030      5        6        2        3        4        4        5
   1037      4        5        4        3        3        5       10
   1044      4        5        9        5        0        1        3
```

PERCENT COPPER   .0021

```
   % RSD COUNTING        9. 3
   1102      2        2        3        4        9        6        5
   1109      4        5        4        4        5        2        9
   1116      9        6        4        3        9        3        5
   1123      8        7       18       43      102      233      404
  ·1130    524      414      219       76       18        6        1
   1137      1        1        2        0        1        0        2
   1144      0        3        1        2        3        4        3
   1151      4        5        0        1        3        2        4
```

PERCENT ANTIMONY   .0284

```
   % RSD COUNTING        2. 2
   1288      3        2        2        2        2        2        3
   1295      1        2        4        3        4        1        1
   1302      2        2        5       ,2        2        1        0
   1309      5        1        1        0        1        0        3
   1316      1        5        1        3        4        4        1
   1323      1        1        3        4        2        2        2
   1330      2        2        1        3        4        5        1
   1337      0        2        0        0        2        0        2
```

PERCENT ARSENIC   —. 0001

```
   % RSD COUNTING     -387. 2
CENTROID CHANNEL COPPER        1023    HALF-LIFE CU-64      768 MIN.
                 ANTIMONY      1130              SB-122    4043 MIN.
                 ARSENIC       1316              AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER      257. 02    BACKGROUND SPACING:
                 ANTIMONY    149. 64       COPPER    25
                 ARSENIC      31. 07       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
    E=2. 7183                          BACKGROUND CHANNELS 10
    LN2=. 69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0248:04

RF   PB   Q304H-1

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2149:06   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   301 SEC   VOLUME   UG   11900.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                             OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

     995   8   5   5   4   7   7   7
    1002   3   9   10   7   9   8   6
    1009   5   7   10   7   10   5   10
    1016   9   12   6   16   20   30   27
    1023   17   21   23   24   12   15   13
    1030   8   10   3   5   11   10   9
    1037   5   3   9   4   6   8   6
    1044   13   0   8   10   5   8   3
PERCENT COPPER   .0014
    % RSD COUNTING   12.0
    1102   4   9   9   8   7   5   9
    1109   11   14   10   8   9   7   12
    1116   4   10   13   18   9   4   16
    1123   5   17   29   85   240   533   895
    1130   1042   822   497   202   39   8   2
    1137   2   1   0   1   7   7   2
    1144   3   3   0   3   6   2   4
    1151   1   2   9   7   3   2   1
PERCENT ANTIMONY   .0528
    % RSD COUNTING   1.5
    1285   3   2   2   3   3   2   2
    1292   2   2   6   3   9   3   3
    1299   4   1   4   3   2   2   5
    1306   3   0   2   3   5   3   1
    1313   2   3   4   4   1   2   0
    1320   4   2   4   5   4   3   2
    1327   1   3   2   3   3   2   1
    1334   1   3   5   4   2   1   1
PERCENT ARSENIC   -.0001
    % RSD COUNTING   -375.9
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1313   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0249:57

RF   PB   Q304H-2

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 2154:20	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	301 SEC	VOLUME	UG 11014.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                      OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

995	7	4	7	13	7	8	3
1002	3	10	4	12	10	6	6
1009	5	8	9	9	6	2	4
1016	10	10	6	9	23	20	22
1023	27	29	27	27	13	19	5
1030	8	11	5	7	8	6	8
1037	11	5	7	8	5	5	3
1044	3	6	9	3	4	11	5

PERCENT COPPER   .0016
   % RSD COUNTING   11.9

1102	3	7	7	8	7	7	7
1109	6	10	13	12	12	8	9
1116	9	5	11	15	6	10	8
1123	17	13	30	77	212	448	765
1130	944	779	377	168	33	11	0
1137	0	1	3	4	2	4	1
1144	3	1	5	5	3	2	3
1151	3	2	4	2	2	4	1

PERCENT ANTIMONY   .0499
   % RSD COUNTING   1.6

1285	1	1	1	3	3	0	3
1292	4	1	5	4	2	1	3
1299	1	3	1	2	4	3	3
1306	4	1	2	5	4	3	2
1313	0	0	4	6	0	0	2
1320	3	4	3	5	1	0	5
1327	1	0	3	1	1	2	3
1334	0	4	7	0	1	2	2

PERCENT ARSENIC   .0000
   % RSD COUNTING   762.3

CENTROID CHANNEL COPPER	1023	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1130	SB-122	4043 MIN.
ARSENIC	1313	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	257.02	BACKGROUND SPACING:	
ANTIMONY	149.64	COPPER	25
ARSENIC	31.07	ANTIMONY	25

CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315 .

RF   PB   Q304H-3

```
SAMPLE TIME              2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME         2JAN80 2159:34   TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME     301 SEC                  VOLUME     UG       11777.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15


CALIBRATION DATE         5OCT79 1357:49   KEV/CH        0.500
                                          OFFSET        0.543


                   NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2.000         SLOPE         0.500 E-3
SENSITIVITY      16   B =   10.000         OFFSET        4.500
LIBRARY NUMBER    1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)  80.00


   996      5      6      5      6      4      8      5
  1003      8      7      3      7      9      9      1
  1010      5      8      9      8      6      4      4
  1017      7      6     10     14     30     29     33
  1024     32     35     12     17     12      8      4
  1031      8      4      8      4      2      5      2
  1038      6      3      7      8      6      8      4
  1045      8      5      5      7      4      9      7
```

PERCENT COPPER   .0017
```
   % RSD COUNTING    10.4
  1102      7      8     10      8      4      8     10
  1109      8      5      6      3      4      3     10
  1116      7      3     10     13      9     12      6
  1123     11     11     25     74    194    473    756
  1130    945    710    394    164     46     11      3
  1137      3      1      1      1      5      0      1
  1144      6      4      1      1      2      1      3
  1151      1      2      2      2      2      0      6
```

PERCENT ANTIMONY   .0459
```
   % RSD COUNTING     1.6
  1288      2      1      2      1      2      5      5
  1295      5      3      4      1      3      0      3
  1302      2      4      3      0      3      3      1
  1309      0      1      2      1      3      3      1
  1316      3      2      3      2      3      1      2
  1323      2      1      2      0      1      1      2
  1330      3      3      5      1      2      3      2
  1337      1      0      1      0      3      4      4
```

PERCENT ARSENIC   .0004
```
   % RSD COUNTING    80.6
CENTROID CHANNEL COPPER        1024   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130             SB-122   4043 MIN.
                 ARSENIC       1316             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02   BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER    25
                 ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                       BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0253:45

RF   PB   Q304I-1

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2204:48   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   300 SEC   VOLUME   UG   11390.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                        NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

   996   6   4   5   5   5   2   6
  1003   7   5   5   5   7   9   5
  1010   3   6   5   4   4   7   5
  1017   7   9   9   17   16   34   29
  1024   28   31   19   18   12   10   9
  1031   3   6   2   4   4   6   6
  1038   3   4   6   2   2   5   5
  1045   3   6   4   2   2   4   5
PERCENT COPPER   .0018
   % RSD COUNTING   9.5
  1102   6   6   4   8   4   4   7
  1109   2   3   6   7   5   1   3
  1116   8   4   6   6   5   8   6
  1123   10   11   21   55   124   292   467
  1130   555   487   265   99   20   6   3
  1137   2   0   0   1   2   0   2
  1144   0   1   3   2   1   1   2
  1151   0   1   2   2   2   0   0
PERCENT ANTIMONY   .0299
   % RSD COUNTING   2.1
  1285   1   1   2   2   1   4   2
  1292   0   2   3   3   4   1   3
  1299   3   3   1   4   0   1   0
  1306   0   1   5   1   4   1   1
  1313   2   3   0   3   2   1   3
  1320   3   2   1   0   0   1   2
  1327   0   3   0   3   1   0   0
  1334   2   0   0   1   1   4   2
PERCENT ARSENIC   .0005
   % RSD COUNTING   65.4
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1313   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0255:38

RF                      PB                      Q304I-2

SAMPLE TIME             2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2210:02   TYPE       7.5MIN.
PRESET TIME     300 SEC                  GEOMETRY   SHELF 1        0.250
ELAPSED TIME    300 SEC                  VOLUME     UG        13032.000
LIVE TIME       300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH         0.500
                                         OFFSET         0.543

                        NORMALIZATION CONSTANTS    GAMMA
FWHM                 5   A =     2.000            SLOPE      0.500 E-3
SENSITIVITY         16   B =    10.000            OFFSET     4.500
LIBRARY NUMBER       1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO      8   ABUNDANCE LIMIT (%)  80.00

    995        6        5        1        6        5        7        8
   1002        6       12        6        5        1        5        6
   1009        7        4        6        4        6        4        6
   1016        3        8        3       12       16       26       41
   1023       47       38       42       25       13       17       13
   1030        4        8        5        6        2        5        4
   1037        5        8        6        5        0        9        6
   1044        8        2       12        3        2        3        1
PERCENT COPPER                            .0022
   % RSD COUNTING        8.0
   1102        4        4        5        7        6        5        5
   1109        5        5        5        5        4        6        9
   1116        4        3        6       10        6        9        7
   1123       11       12       21       46      137      361      550
   1130      649      538      279       96       29        6        2
   1137        1        2        1        0        3        2        2
   1144        2        2        0        1        1        2        1
   1151        0        2        2        2        3        3        3
PERCENT ANTIMONY                         .0298
   % RSD COUNTING        1.9
   1286        2        0        1        3        2        2        3
   1293        2        4        3        0        3        1        3
   1300        2        2        2        3        0        1        6
   1307        1        1        2        4        1        2        2
   1314        1        1        2        5        0        2        2
   1321        2        1        1        3        2        3        2
   1328        0        5        1        1        2        2        2
   1335        1        1        4        1        0        2        3
PERCENT ARSENIC                         -.0000
   % RSD COUNTING     -387.2
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130             SB-122    4043 MIN.
                 ARSENIC       1314             AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER      257.02   BACKGROUND SPACING:
                 ANTIMONY    149.64      COPPER    25
                 ARSENIC      31.07      ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0257:32

RF                    PB                      Q304I-3

SAMPLE TIME           2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME      2JAN80 2215:16    TYPE       7.5MIN.
PRESET TIME     300 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME    300 SEC                 VOLUME     UG      13454.000
LIVE TIME       300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE      5OCT79 1357:49    KEV/CH         0.500
                                        OFFSET         0.543

                      NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000      SLOPE          0.500 E-3
SENSITIVITY     16    B =   10.000      OFFSET         4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

     995      8       3       6       4       6       5       8
    1002      7       6       3       6       4       5       8
    1009      5       2       4       6       3       9       3
    1016      4       9       5       3      15      18      33
    1023     35      37      34      45      13       7       7
    1030      5       4       4       5       3       5       3
    1037      5       5       6       3       3       5       8
    1044      7       5       4       2       7       6       7
PERCENT  COPPER                          .0019
    % RSD COUNTING        8.7
    1102      6       5       2       2       4       1       4
    1109      4      11       6       5       4       6       7
    1116      7       5       4       8       7       6       8
    1123      8       8      20      52     152     314     549
    1130    702     504     299     114      26       7       0
    1137      3       2       0       4       1       0       2
    1144      3       4       2       6       2       2       3
    1151      0       1       2       2       1       0       2
PERCENT  ANTIMONY                        .0293
    % RSD COUNTING        1.9
    1288      2       6       0       0       4       3       0
    1295      1       4       0       1       1       1       2
    1302      2       0       0       2       1       2       2
    1309      4       0       1       0       1       4       3
    1316      0       3       3       4       1       0       0
    1323      1       0       3       2       1       2       0
    1330      2       1       1       0       0       3       0
    1337      2       0       5       3       2       3       1
PERCENT  ARSENIC                         .0004
    % RSD COUNTING       71.1
CENTROID CHANNEL COPPER       1023    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1130              SB-122   4043 MIN.
                 ARSENIC      1316              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     257.02    BACKGROUND SPACING:
                 ANTIMONY   149.64       COPPER    25
                 ARSENIC     31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

RF   PB   Q304J-1

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI	
ACQUISITION TIME	2JAN80 2220:30	TYPE	7.5MIN.	
PRESET TIME	300 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	301 SEC	VOLUME	UG	10643.000
LIVE TIME	300 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                            OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

996	9	8	5	11	6	7	5
1003	10	8	5	1	10	9	10
1010	2	4	13	9	6	5	11
1017	8	11	8	11	12	29	19
1024	28	24	22	16	11	7	9
1031	7	3	8	6	7	8	9
1038	1	5	6	4	5	10	3
1045	7	9	5	3	6	4	5

PERCENT COPPER   .0014
  % RSD COUNTING   12.8

1102	10	6	7	6	8	3	6
1109	7	7	4	8	7	11	8
1116	5	9	8	11	11	12	14
1123	13	16	17	78	236	529	892
1130	1047	829	501	182	41	9	0
1137	3	2	2	4	1	1	2
1144	1	2	3	2	2	3	2
1151	4	4	5	3	4	4	4

PERCENT ANTIMONY   .0593
  % RSD COUNTING   1.5

1286	4	4	2	1	3	1	5
1293	3	4	6	1	2	1	4
1300	2	3	2	5	1	1	3
1307	1	5	1	2	4	4	3
1314	1	2	1	4	1	1	2
1321	2	1	5	5	1	0	1
1328	3	3	1	2	0	1	2
1335	6	3	3	0	1	1	4

PERCENT ARSENIC   .0001
  % RSD COUNTING   271.9

CENTROID CHANNEL	COPPER	1024	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1314	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0301:19

RF                   PB                    0304J-2

SAMPLE TIME              2JAN80 1033:00    LOCATION    AFFRI
ACQUISITION TIME         2JAN80 2225:44    TYPE        7.5MIN.
PRESET TIME      300 SEC                   GEOMETRY    SHELF 1       0.250
ELAPSED TIME     301 SEC                   VOLUME      UG       10687.000
LIVE TIME        300 SEC                   DETECTOR    GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH          0.500
                                           OFFSET          0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM                5    A =    2.000       SLOPE         0.500 E-3
SENSITIVITY        16    B =   10.000       OFFSET        4.500
LIBRARY NUMBER      1    ENERGY TOLERANCE        1.25
HALF-LIFE RATIO     8    ABUNDANCE LIMIT (%)   80.00

    994       6        3        4        7        7        7        6
   1001       2        5        6        5        8        5        7
   1008       4        5        3        7        4        5        8
   1015       2        3        8        4       16       10       15
   1022      26       22       25       18        9       13       13
   1029       9        1        6        7        7        7        3
   1036       8        3        6        7        4        6        8
   1043       5        5        7        8        3        3        6
PERCENT COPPER                          .0012
   % RSD COUNTING       13.9
   1102       6        9        9        6        8        4        3
   1109       6        4        8        9        6        8        7
   1116      16       13       12        8       12       10       13
   1123      15       14       27       87      221      493      806
   1130     994      826      437      169       39        9        6
   1137       2        2        1        2        4        3        2
   1144       3        5        0        0        1        4        1
   1151       3        1        4        3        4        4        3
PERCENT ANTIMONY                        .0552
   % RSD COUNTING        1.6
   1288       1        1        2        7        4        2        6
   1295       4        1        5        1        2        2        0
   1302       3        1        2        0        3        2        3
   1309       1        3        2        2        1        1        1
   1316       1        3        3        3        3        1        3
   1323       0        1        0        1        1        3        1
   1330       2        0        4        1        4        0        0
   1337       4        2        6        2        1        0        1
PERCENT ARSENIC                         .0001
   % RSD COUNTING      273.2
CENTROID CHANNEL COPPER       1022    HALF-LIFE CU-64      768 MIN.
                 ANTIMONY     1130              SB-122    4043 MIN.
                 ARSENIC      1316              AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER      257.02    BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER    25
                 ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
    E=2.7183                           BACKGROUND CHANNELS 10
    LN2=.69315
```

EXPERIMENT 1   3JAN80 0303:12

RF   PB   Q304J-3

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2230:58   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   300 SEC   VOLUME   UG   8104.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

    995   3   2   1   6   6   5   5
   1002   4   6   4   2   5   3   7
   1009   4   7   4   5   6   3   4
   1016   6   2   7   10   12   13   15
   1023   21   16   27   18   10   4   4
   1030   5   5   3   2   9   3   4
   1037   4   5   3   4   4   2   1
   1044   4   5   10   6   7   8   6
PERCENT COPPER   .0015
   % RSD COUNTING   15.4
   1102   0   3   4   3   6   7   8
   1109   4   9   4   9   6   2   7
   1116   2   4   4   10   9   8   11
   1123   8   8   22   51   167   385   555
   1130   693   597   338   129   39   9   4
   1137   2   1   4   1   1   1   2
   1144   3   3   0   1   3   1   1
   1151   2   0   0   0   2   0   0
PERCENT ANTIMONY   .0531
   % RSD COUNTING   1.8
   1288   1   0   1   1   0   0   1
   1295   4   1   3   3   1   2   3
   1302   2   2   2   2   2   0   1
   1309   1   1   0   0   1   2   4
   1316   1   3   4   1   1   3   2
   1323   2   3   2   1   0   2   2
   1330   2   1   0   3   1   2   1
   1337   1   0   0   3   2   2   2
PERCENT ARSENIC   .0005
   % RSD COUNTING   93.5
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   3JAN80 0305:06

RF   PB   Q304K-1

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI	
ACQUISITION TIME	2JAN80 2236:12	TYPE	7.5MIN.	
PRESET TIME	300 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	302 SEC	VOLUME	UG	13314.000
LIVE TIME	300 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                              OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B = 10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	20	13	14	22	22	21	14
1002	23	14	12	17	19	15	22
1009	9	13	21	12	18	18	20
1016	15	10	20	26	42	55	42
1023	71	49	64	35	37	30	17
1030	14	15	14	21	15	20	11
1037	19	8	13	15	19	11	15
1044	13	17	8	15	9	14	13

PERCENT COPPER   .0028
% RSD COUNTING   8.5

1102	14	19	25	19	22	12	13
1109	17	19	14	19	22	16	21
1116	15	23	25	35	42	46	43
1123	39	34	87	217	635	1508	2508
1130	2883	2342	1388	518	125	26	5
1137	5	3	3	3	5	3	6
1144	6	7	4	7	2	2	5
1151	3	6	5	2	4	5	4

PERCENT ANTIMONY   .1330
% RSD COUNTING   .9

1287	3	5	3	8	6	1	8
1294	10	12	8	3	4	7	4
1301	4	4	0	0	7	0	6
1308	2	3	3	0	5	4	3
1315	5	8	4	1	3	3	2
1322	2	3	2	4	3	2	5
1329	5	3	3	5	2	7	2
1336	2	0	1	5	6	1	2

PERCENT ARSENIC   .0007
% RSD COUNTING   62.9

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   3JAN80 0306:59

RF   PB   Q304K-2

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 2241:27	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	302 SEC	VOLUME	UG 12019.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                            OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

995	22	22	15	10	10	14	16
1002	11	14	15	19	15	11	23
1009	15	11	16	19	16	7	18
1016	14	11	16	21	39	36	52
1023	46	41	49	41	22	25	20
1030	20	8	8	13	14	13	12
1037	12	18	13	15	16	9	17
1044	12	12	20	14	18	15	18

PERCENT COPPER   .0024
    % RSD COUNTING   10.4

1102	17	13	14	19	13	18	7
1109	19	12	14	22	18	9	18
1116	12	22	32	44	47	50	34
1123	33	43	87	223	630	1448	2344
1130	2725	2246	1229	417	107	20	6
1137	8	2	8	8	6	2	4
1144	4	6	4	8	4	6	10
1151	3	5	8	5	6	3	7

PERCENT ANTIMONY'   .1382
    % RSD COUNTING   .9

1288	6	4	3	6	8	11	8
1295	6	6	4	1	2	3	1
1302	1	4	2	2	4	4	0
1309	2	4	4	2	2	5	3
1316	3	7	3	7	1	6	3
1323	2	4	1	1	3	4	0
1330	5	3	3	2	4	2	2
1337	4	4	5	3	3	0	2

PERCENT ARSENIC   .0009
    % RSD COUNTING   55.1

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

EXPERIMENT 1   3JAN80 0308:53

RF   PB   Q304K-3

```
SAMPLE TIME              2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME         2JAN80 2246:42    TYPE       7.5MIN.
PRESET TIME      300 SEC                   GEOMETRY   SHELF 1        0.250
ELAPSED TIME     302 SEC                   VOLUME     UG       12209.000
LIVE TIME        300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH         0.500
                                           OFFSET         0.543

                    NORMALIZATION CONSTANTS     GAMMA
FWHM             5    A =     2.000         SLOPE          0.500 E-3
SENSITIVITY     16    B =    10.000         OFFSET         4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00
```

995	24	15	9	13	15	19	16
1002	12	14	16	17	13	18	20
1009	22	8	17	12	15	9	24
1016	21	19	28	17	32	43	58
1023	52	54	43	41	24	21	20
1030	19	12	17	19	14	13	11
1037	25	14	8	12	17	31	17
1044	12	16	18	16	12	8	11

PERCENT COPPER   .0028
```
   % RSD COUNTING      8.9
```

1102	12	18	14	16	21	12	17
1109	21	17	24	15	17	23	21
1116	12	22	28	32	40	36	36
1123	35	52	80	210	637	1446	2392
1130	2663	2146	1162	434	108	24	7
1137	5	2	2	3	4	3	6
1144	1	6	4	12	4	6	4
1151	1	6	5	2	4	3	1

PERCENT ANTIMONY   .1343
```
   % RSD COUNTING       .9
```

1286	4	4	4	4	6	4	6
1293	9	4	5	4	3	5	4
1300	2	2	2	1	4	6	3
1307	2	4	3	0	6	2	2
1314	5	1	7	8	5	2	4
1321	1	3	1	2	2	1	5
1328	3	5	2	1	2	3	2
1335	9	4	4	6	4	4	8

PERCENT ARSENIC   .0009
```
   % RSD COUNTING     51.5
```

```
CENTROID CHANNEL COPPER         1023    HALF-LIFE CU-64      768 MIN.
                 ANTIMONY       1130              SB-122    4043 MIN.
                 ARSENIC        1314              AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER       257.02    BACKGROUND SPACING:
                 ANTIMONY     149.64        COPPER     25
                 ARSENIC       31.07        ANTIMONY  25
CONSTANTS:                                  ARSENIC   10
    E=2.7183                            BACKGROUND CHANNELS 10
    LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0310:46

RF   PB   Q304L-1

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2251:57   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   301 SEC   VOLUME   UG   10221.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                            OFFSET   0.543

                        NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

    996   19   12   13   16   11   10   11
   1003   7   10   7   12   15   11   9
   1010   9   14   9   14   8   12   14
   1017   13   14   16   19   20   41   29
   1024   33   29   29   23   22   11   9
   1031   6   10   5   6   12   8   8
   1038   10   5   9   7   9   9   6
   1045   9   6   6   11   10   14   13
PERCENT COPPER   .0018
   % RSD COUNTING   13.7
   1102   9   13   15   14   13   7   11
   1109   16   7   11   10   13   10   12
   1116   18   15   19   25   21   25   19
   1123   24   29   61   157   461   973   1519
   1130   1859   1539   824   309   79   16   11
   1137   3   1   1   9   5   4   4
   1144   1   6   5   4   2   3   4
   1151   3   0   4   1   4   2   3
PERCENT ANTIMONY   .1103
   % RSD COUNTING   1.1
   1287   1   1   1   4   3   2   1
   1294   6   5   6   5   5   1   3
   1301   2   1   2   1   2   3   4
   1308   4   5   3   2   4   6   2
   1315   2   9   2   9   1   5   1
   1322   1   2   6   3   2   1   2
   1329   3   2   1   4   2   2   3
   1336   1   2   5   2   3   1   5
PERCENT ARSENIC   .0013
   % RSD COUNTING   45.7
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1130   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0312:40

RF                    PB                        0304L-2

SAMPLE TIME              2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME         2JAN80 2257:12   TYPE       7.5MIN.
PRESET TIME        300 SEC                GEOMETRY   SHELF 1       0.250
ELAPSED TIME       301 SEC                VOLUME     UG       10659.000
LIVE TIME          300 SEC                DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49   KEV/CH         0.500
                                          OFFSET         0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000           SLOPE        0.500 E-3
SENSITIVITY       16    B =   10.000           OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    996      12       18       16       10       14       12        9
   1003      18       15       10       13       10       13       12
   1010       6       11       14        8       12        9        8
   1017      14       10       17       19       20       42       41
   1024      48       34       30       22       16        9       12
   1031       8        9        5       13        3       11        8
   1038       6       16        8        9        6       13        9
   1045       7        9       16       11       10        7        9
```

PERCENT COPPER   .0021
```
   % RSD COUNTING      11.9
   1102       6       16        9       16        7        7        7
   1109      14       12       16       17        7        9       14
   1116      11       18       17       25       34       24       27
   1123      28       25       70      173      429     1000     1633
   1130    1937     1484      886      319       90       16        4
   1137       4        2        2        0        1        3        0
   1144       4        2        6        1        2        3        2
   1151       3        8        3        1        2        1        4
```

PERCENT ANTIMONY   .1089
```
   % RSD COUNTING       1.1
   1288       7        5        1        3        4       12        5
   1295       3        2        4        2        2        2        4
   1302       3        2        0        0        1        0        2
   1309       2        4        1        0        4        5        8
   1316       5        2        5        1        2        3        2
   1323       3        6        1        3        1        2        5
   1330       2        3        1        5        4        0        2
   1337       6        0        3        1        3        2        2
```

PERCENT ARSENIC   .0015
```
   % RSD COUNTING      34.1
CENTROID CHANNEL COPPER        1024    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130              SB-122   4043 MIN.
                 ARSENIC       1316              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02    BACKGROUND SPACING:
                 ANTIMONY    149.64       COPPER    25
                 ARSENIC      31.07       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
    E=2.7183                           BACKGROUND CHANNELS 10
    LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    2JAN80 0314:34

RF                      PB                      Q304L-3

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2302:27    TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME     301 SEC                  VOLUME     UG        8075.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH          0.500
                                          OFFSET          0.543

                   NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =     2.000        SLOPE        0.500 E-3
SENSITIVITY     16    B =    10.000        OFFSET       4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    995        7        9       11        9        9        8        7
   1002        7        5       10       11        4        6        7
   1009        8        6       15        5        7       11        8
   1016        8        9       20       15       19       13       23
   1023       23       22       20       30       19       17       14
   1030       17        6        9       12        5        6       11
   1037       10       13        5        6        7        5        9
   1044        8        7        8        7        5        9        8
PERCENT COPPER                            .0017
   % RSD COUNTING       15.6
   1102        8       12        6        6        5       11        8
   1109       12        9       13       12        9       10       12
   1116       17       11       13       22       24       15       17
   1123       23       22       48      116      330      725     1173
   1130     1413     1076      607      208       60       13        1
   1137        1        3        1        0        1        1        3
   1144        4        2        6        3        2        4        3
   1151        3        5        2        2        0        3        3
PERCENT ANTIMONY                          .1035
   % RSD COUNTING        1.3
   1286        2        4        2        3        1        2        1
   1293        6        4        1        2        3        4        2
   1300        0        3        0        4        3        0        1
   1307        2        3        2        2        3        1        2
   1314        7        2        2        5        2        0        1
   1321        1        1        5        1        3        1        4
   1328        1        3        2        2        1        1        2
   1335        1        1        2        1        2        2        0
PERCENT ARSENIC                           .0009
   % RSD COUNTING       68.2
CENTROID CHANNEL COPPER       1023    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1130              SB-122   4043 MIN.
                 ARSENIC      1314              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     257.02    BACKGROUND SPACING:
                 ANTIMONY   149.64        COPPER     25
                 ARSENIC     31.07        ANTIMONY   25
CONSTANTS:                               ARSENIC    10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   3JAN80 0316:27

RF   PB   Q304M-1

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 2307:41	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	300 SEC	VOLUME	UG 15319.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

996	1	5	2	4	4	4	2
1003	2	3	3	3	5	4	4
1010	6	6	2	4	4	6	4
1017	3	12	14	12	23	31	37
1024	29	33	27	17	7	9	6
1031	4	9	4	4	5	2	3
1038	2	5	3	1	6	4	7
1045	2	0	3	1	1	5	7

PERCENT COPPER   .0017
% RSD COUNTING   8.6

1102	3	5	2	2	6	6	5
1109	2	5	4	5	7	10	5
1116	9	5	6	3	8	7	7
1123	6	6	17	21	93	203	330
1130	399	338	181	56	22	5	2
1137	1	2	1	4	4	1	0
1144	3	4	1	3	1	1	0
1151	1	1	0	1	2	3	1

PERCENT ANTIMONY   .0157
% RSD COUNTING   2.5

1285	2	1	1	2	4	1	3
1292	2	3	5	4	4	2	2
1299	1	1	3	4	6	0	0
1306	3	2	3	2	5	2	3
1313	1	2	1	2	1	0	0
1320	3	2	0	1	2	1	3
1327	3	1	6	0	3	0	0
1334	0	1	0	2	1	3	1

PERCENT ARSENIC   .0001
% RSD COUNTING   200.4

CENTROID CHANNEL	COPPER	1024	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1313	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER 25	
	ARSENIC	31.07	ANTIMONY 25	

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   3JAN80 0318:21

RF   PB   0304M-2

SAMPLE TIME	2JAN80 1033:00	LOCATION AFFRI
ACQUISITION TIME	2JAN80 2312:55	TYPE 7.5MIN.
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 300 SEC		VOLUME UG 16154.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

995	2	8	10	3	4	5	4
1002	4	3	2	7	3	4	3
1009	7	5	2	4	4	3	4
1016	2	4	7	8	16	16	38
1023	43	43	37	26	12	10	7
1030	5	4	2	8	10	5	2
1037	1	6	2	4	5	6	4
1044	7	2	4	4	1	3	5

PERCENT COPPER   .0017
   % RSD COUNTING   8.5

1102	2	4	6	4	5	4	6
1109	5	5	5	3	4	4	2
1116	4	4	5	6	6	3	4
1123	4	6	16	40	100	192	323
1130	399	324	174	83	20	9	3
1137	2	1	6	3	2	2	2
1144	2	3	2	2	2	1	5
1151	3	3	6	5	3	3	0

PERCENT ANTIMONY   .0147
   % RSD COUNTING   2.5

1288	3	3	1	0	2	4	1
1295	4	1	3	1	1	0	2
1302	3	4	4	1	2	0	3
1309	3	0	2	1	1	4	1
1316	2	0	4	2	4	1	2
1323	0	2	5	2	3	2	0
1330	4	3	1	0	2	0	3
1337	1	1	0	3	2	1	1

PERCENT ARSENIC   -.0001
   % RSD COUNTING   -198.2

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1130	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER 25	
	ARSENIC	31.07	ANTIMONY 25	

CONSTANTS: ARSENIC 10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0320:14

RF                      PB                        Q304M-3

SAMPLE TIME             2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2318:09   TYPE       7.5MIN.
PRESET TIME     300 SEC                  GEOMETRY   SHELF 1        0.250
ELAPSED TIME    300 SEC                  VOLUME     UG         10657.000
LIVE TIME       300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH          0.500
                                         OFFSET          0.543

                        NORMALIZATION CONSTANTS    GAMMA
FWHM                5   A =    2.000      SLOPE           0.500 E-3
SENSITIVITY        16   B =   10.000      OFFSET          4.500
LIBRARY NUMBER      1   ENERGY TOLERANCE       1.25
HALF-LIFE RATIO     8   ABUNDANCE LIMIT (%)   80.00

    996        5        6        2 ·      7        3        7        2
   1003        1        2        3        4        1        5        5
   1010        4        5        3        3        5        6        5
   1017        4        6       11        8       12       29       22
   1024       31       27       21       13        9        5        3
   1031        5        3        3        5        4        2        7
   1038        5        5        4        5        4        7        2
   1045        3        3        1        2        3        3        3
PERCENT COPPER                           .0018
   % RSD COUNTING      10.4
   1102        3        3        5        3        4        2        5
   1109        3        4        5        3        6        3        3
   1116        6        3        3        2        1        5        5
   1123        4        6       15       27       50      143      227
   1130      258      197      118       43       13        2        2
   1137        3        2        1        4        4        2        1
   1144        2        3        3        1        4        2        1
   1151        2        2        3        3        4        2        2
PERCENT ANTIMONY                         .0145
   % RSD COUNTING       3.2
   1285        4        5        2        0        1        4        5
   1292        0        2        4        3        2        5        3
   1299        3        2        1        0        2        0        2
   1306        2        2        0        3        6        2        1
   1313        2        1        3        4        2        1        1
   1320        2        2        3        2        5        4        2
   1327        1        3        3        0        0        2        1
   1334        2        2        4        2        1        2        3
PERCENT ARSENIC                          .0003
   % RSD COUNTING      135.0
CENTROID CHANNEL COPPER        1024   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130             SB-122   4043 MIN.
                 ARSENIC       1313             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      257.02   BACKGROUND SPACING:
                 ANTIMONY    149.64      COPPER    25
                 ARSENIC      31.07      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    2JAN80 0322:08

RF                      PB                      Q304N-1

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2323:23    TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1        0.250
ELAPSED TIME     302 SEC                  VOLUME     UG        15018.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH          0.500
                                          OFFSET          0.543

                        NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000        SLOPE          0.500 E-3
SENSITIVITY     16    B =   10.000        OFFSET         4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

     996      22      14      21      21      21      16      15
    1003      20      14      13      15      13      11      21
    1010      19      12      12      11      13      14      14
    1017      21      19      17      33      37      55      56
    1024      58      48      47      34      20      15      22
    1031      12      18      19      15      14       9      16
    1038      17      20      16      10      13      18       9
    1045       9      15      17      10      13      13      12
PERCENT COPPER                          .0023
   % RSD COUNTING        9.4
    1102      23       9      17       9      17      15      15
    1109      14      22      15      17      13      19      16
    1116       9      33      34      31      47      41      37
    1123      32      50      90     255     655    1535    2313
    1130    2829    2156    1197     419     106      30       5
    1137       4       5       3       3       7       8       5
    1144       6       4       2       7       6       3       3
    1151       5       4       6       4       7       6       2
PERCENT ANTIMONY                        .1121
   % RSD COUNTING        .9
    1287       1       3       2       5       4       6       8
    1294       9       3       4      10       6       2       3
    1301       1       3       2       3       2       5       2
    1308       2       5       0       4       5       4       4
    1315       3       5       3       8       2       6       3
    1322       2       3       6       6       4       3       3
    1329       1       5       6       2       3       4       2
    1336       5       3       3       3       1       1       2
PERCENT ARSENIC                         .0004
   % RSD COUNTING      111.2
CENTROID CHANNEL COPPER       1024    HALF-LIFE CU-64      768 MIN.
                 ANTIMONY     1130              SB-122    4043 MIN.
                 ARSENIC      1315              AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER     257.02    BACKGROUND SPACING:
                 ANTIMONY   149.64       COPPER    25
                 ARSENIC     31.07       ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   2JAN80 0324:02

RF   PB   0304N-2

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2328:38   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   302 SEC   VOLUME   UG   14732.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    995   24   22   12   14   19   14   18
   1002   15   15   16   25   16   20   9
   1009   24   16   15   13   15   14   14
   1016   12   11   19   24   29   52   48
   1023   59   59   52   39   22   25   22
   1030   21   16   14   19   15   10   13
   1037   12   14   14   18   14   12   20
   1044   8   15   12   10   16   16   16
PERCENT COPPER   .0024
   % RSD COUNTING   9.0
   1102   19   17   16   13   19   16   14
   1109   13   15   15   13   12   13   19
   1116   24   17   28   34   35   35   40
   1123   30   35   91   205   617   1406   2335
   1130   2597   2039   989   377   88   27   6
   1137   5   2   4   1   6   2   5
   1144   5   6   6   5   8   3   2
   1151   5   4   3   5   4   2   2
PERCENT ANTIMONY   .1067
   % RSD COUNTING   .9
   1288   5   5   5   4   5   9   5
   1295   12   1   5   4   4   6   5
   1302   3   2   3   4   3   4   1
   1309   3   2   4   3   3   3   1
   1316   8   8   6   4   0   0   3
   1323   5   3   3   4   8   3   5
   1330   2   4   0   1   5   5   3
   1337   3   4   3   2   6   2   1
PERCENT ARSENIC   .0004
   % RSD COUNTING   97.8
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                  ANTIMONY   1130   SB-122   4043 MIN.
                  ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                  ANTIMONY   149.64   COPPER   25
                  ARSENIC   31.07   ANTIMONY   25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   3JAN80 0325:55

RF   PB   Q304N-3

SAMPLE TIME	2JAN80 1033:00	LOCATION	AFFRI
ACQUISITION TIME	2JAN80 2333:53	TYPE	7.5MIN.
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	302 SEC	VOLUME	UG 15846.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                      OFFSET   0.543

NORMALIZATION CONSTANTS . GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

994	15	14	14	14	15	12	9
1001	15	21	11	14	17	11	15
1008	20	16	13	10	15	14	11
1015	12	18	17	12	24	32	38
1022	46	50	53	44	21	31	19
1029	20	15	13	18	14	10	15
1036	14	17	9	13	19	15	7
1043	14	11	14	9	14	18	12

PERCENT COPPER   .0019
    % RSD COUNTING   10.1

1102	11	17	18	16	14	11	17
1109	23	18	22	20	14	19	18
1116	17	30	30	38	33	38	21
1123	24	40	94	252	658	1512	2428
1130	2639	2054	1132	373	86	10	5
1137	5	6	7	7	5	2	4
1144	0	5	5	2	4	4	3
1151	2	1	4	4	3	1	3

PERCENT ANTIMONY   .1035
    % RSD COUNTING   .9

1286	5	2	4	2	3	2	4
1293	6	5	5	2	2	3	6
1300	4	3	4	3	0	4	2
1307	3	4	2	2	3	3	1
1314	6	5	9	4	2	2	6
1321	1	3	4	3	3	3	4
1328	3	2	0	4	1	3	3
1335	1	4	1	1	1	1	3

PERCENT ARSENIC   .0006
    % RSD COUNTING   66.9

CENTROID CHANNEL COPPER	1022	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1130	SB-122	4043 MIN.
ARSENIC	1314	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	257.02	BACKGROUND SPACING:	
ANTIMONY	149.64	COPPER	25
ARSENIC	31.07	ANTIMONY	25
CONSTANTS:		ARSENIC	10
E=2.7183		BACKGROUND CHANNELS 10	
LN2=.69315			

FBI LAB WASHINGTON DC

EXPERIMENT 1   2JAN80 0327:48

RF   PB   Q3040-1

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2339:08   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   300 SEC   VOLUME   UG   12915.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    995   8   4   3   4   5   5   3
   1002   4   4   6   2   9   7   4
   1009   3   8   2   1   9   3   5
   1016   6   12   8   15   15   29   28
   1023   36   32   34   29   15   11   6
   1030   5   9   3   5   5   2   4
   1037   8   3   6   4   6   1   5
   1044   4   2   9   2   3   2   3
PERCENT COPPER   .0021
   % RSD COUNTING   8.6
   1102   5   6   1   10   3   7   4
   1109   3   6   10   7   8   5   7
   1116   10   3   3   4   2   6   2
   1123   3   12   25   46   173   379   558
   1130   624   467   246   83   29   7   3
   1137   2   1   3   2   1   1   2
   1144   3   2   4   1   6   2   0
   1151   1   1   5   2   0   4   3
PERCENT ANTIMONY   .0296
   % RSD COUNTING   2.0
   1286   3   1   0   3   2   1   5
   1293   4   5   2   1   0   1   3
   1300   2   2   1   1   1   2   1
   1307   0   2   1   1   3   3   3
   1314   3   1   1   1   3   2   2
   1321   0   0   3   4   1   1   1
   1328   2   1   2   2   1   2   2
   1335   1   1   2   2   2   3   3
PERCENT ARSENIC   .0003
   % RSD COUNTING   112.2
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                  ANTIMONY   1130   SB-122   4043 MIN.
                  ARSENIC   1314   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                  ANTIMONY   149.64   COPPER   25
                  ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    2JAN80 0329:42

RF                      PB                          Q3040-2

SAMPLE TIME             2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME        2JAN80 2344:22    TYPE       7.5MIN.
PRESET TIME      300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME     300 SEC                  VOLUME     UG        9105.000
LIVE TIME        300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH          0.500
                                          OFFSET          0.543

                        NORMALIZATION CONSTANTS   GAMMA
FWHM               5    A =    2.000       SLOPE         0.500 E-3
SENSITIVITY       16    B =   10.000       OFFSET        4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

   995       3        5        6        5        6        5        3
  1002       5        3        7        3        4        4        3
  1009       4        3        3        4        4        4        4
  1016       8        6        8       10       15       17       19
  1023      38       23       25       17        6        9        7
  1030       5        5        6        8        3        3        5
  1037       2        4        1        1        4        7        1
  1044       8        3        2        1        2        7        3
PERCENT COPPER                    .0021
   % RSD COUNTING      10.8
  1102       4        2        6        4        7        5        6
  1109       2        4        4        2        5        3        5
  1116       1        7        3        2        6        4       11
  1123       7        8       20       54      136      271      418
  1130     462      357      151       60       18        3        2
  1137       0        2        6        2        4        2        0
  1144       0        1        1        2        3.       2        2
  1151       2        5        2        3        2        2        3
PERCENT ANTIMONY                  .0307
   % RSD COUNTING       2.3
  1287       3        2        1        3        2        2        2
  1294       4        6        3        7        1        3        2
  1301       2        2        5        4        1        1        2
  1308       1        1        0        1        1        1        2
  1315       2        1        1        3        0        3        1
  1322       0        0        1        2        4        3        2
  1329       2        2        4        1        1        2        2
  1336       1        1        2        2        2        0        2
PERCENT ARSENIC                  -.0005
   % RSD COUNTING    -102.0
CENTROID CHANNEL COPPER        1023    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1130              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER       257.02    BACKGROUND SPACING:
                 ANTIMONY     149.64       COPPER    25
                 ARSENIC       31.07       ANTIMONY  25
CONSTANTS:                                 ARSENIC   10
   E=2.7183                             BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0331:36

RF   PB   03040-3

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2349:36   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   300 SEC   VOLUME   UG   9830.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                        OFFSET   0.543

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

    996   3   3   1   3   6   1   2
   1003   3   3   3   4   3   2   5
   1010   3   9   3   5   4   10   6
   1017   12   8   12   11   19   26   39
   1024   27   20   16   14   10   9   6
   1031   6   3   4   3   2   5   4
   1038   5   4   5   5   5   6   4
   1045   3   2   2   2   4   3   5
PERCENT COPPER   .0022
   % RSD COUNTING   9.6
   1102   4   7   4   5   3   2   5
   1109   7   3   3   3   9   4   2
   1116   11   9   7   4   2   8   4
   1123   8   4   18   35   152   284   436
   1130   501   344   156   48   8   5   2
   1137   0   2   4   3   1   5   1
   1144   3   3   0   2   1   4   2
   1151   3   3   2   2   3   5   2
PERCENT ANTIMONY   .0295
   % RSD COUNTING   2.3
   1287   5   0   5   3   3   3   0
   1294   2   0   2   3   2   1   1
   1301   2   2   2   1   0   1   3
   1308   1   1   3   2   1   1   1
   1315   1   2   3   3   0   3   3
   1322   1   5   2   3   4   1   4
   1329   2   4   1   4   2   3   1
   1336   2   3   2   4   2   1   2
PERCENT ARSENIC   -.0003
   % RSD COUNTING   -153.9
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                  ANTIMONY   1130   SB-122   4043 MIN.
                  ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                  ANTIMONY 149.64   COPPER   25
                  ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   2JAN80 0333:29

RF   PB   626-1

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   2JAN80 2354:50   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   309 SEC   VOLUME   UG   9004.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                       OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER 1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

     995   74   71   71   66   66   59   52
    1002   61   74   69   58   59   60   64
    1009   57   77   74   58   61   78   77
    1016   82   109   184   283   443   632   885
    1023   874   843   704   476   306   196   100
    1030   80   60   64   61   60   62   58
    1037   61   48   62   57   53   55   49
    1044   52   50   50   46   52   44   51
PERCENT COPPER   .0794
   % RSD COUNTING   1.6
    1101   49   49   62   65   73   62   71
    1108   51   63   51   75   71   73   67
    1115   70   84   93   119   152   123   136
    1122   105   135   251   583   1557   3940   7639
    1129   10770   10677   7420   3302   1069   227   54
    1136   30   27   27   17   28   32   17
    1143   17   22   15   15   15   11   22
    1150   17   18   13   14   16   10   9
PERCENT ANTIMONY   .7676
   % RSD COUNTING   .4
    1288   13   11   15   17   28   41   35
    1295   30   12   9   7   8   8   7
    1302   10   7   14   6   9   13   9
    1309   6   11   6   11   12   13   19
    1316   12   16   10   12   5   5   13
    1323   5   5   4   9   8   5   11
    1330   8   9   8   13   13   6   5
    1337   10   3   8   10   4   13   7
PERCENT ARSENIC   .0037
   % RSD COUNTING   33.6
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1316   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0335:23

RF                    PB                    626-2

SAMPLE TIME            2JAN80 1033:00    LOCATION   AFFRI
ACQUISITION TIME       3JAN80 0000:12    TYPE       7.5MIN.
PRESET TIME     300 SEC                  GEOMETRY   SHELF 1       0.250
ELAPSED TIME    308 SEC                  VOLUME     UG        8513.000
LIVE TIME       300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE       5OCT79 1357:49    KEV/CH        0.500
                                         OFFSET        0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000       SLOPE        0.500 E-3
SENSITIVITY     16    B =   10.000       OFFSET       4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    995        58        56        46        59        63        66        59
   1002        49        50        65        61        63        53        59
   1009        40        50        64        55        67        68        60
   1016        96       118       182       293       428       594       830
   1023       893       826       596       407       260       138       105
   1030        72        69        45        60        39        45        29
   1037        44        41        45        43        56        46        33
   1044        49        46        45        52        43        51        31
PERCENT  COPPER                    .0800
   % RSD COUNTING      1.6
   1101        55        38        57        66        63        52        58
   1108        53        54        59        60        57        70        63
   1115        65        72        99       114       141       142       112
   1122       126       123       225       523      1437      3579      6783
   1129      9679      9214      6049      2896       860       214        38
   1136        30        15        22        11        22        12        18
   1143        17        11        18        10        17        13        16
   1150        15         8        11        15         9        15        11
PERCENT  ANTIMONY                  .7109
   % RSD COUNTING       .5
   1286        12         3        10         6         8        20        26
   1293        23        25        11        15        10        10         9
   1300        10        13        10        10         8        10        15
   1307         7         7         8         5         9        13        11
   1314        12        18        13        10         9         7        13
   1321        11         7         6        10        11         7        12
   1328         6         7         9         7         2         9         4
   1335         4         7         7        15         8        15         7
PERCENT  ARSENIC                   .0021
   % RSD COUNTING     60.9
CENTROID CHANNEL COPPER      1023    HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129              SB-122  4043 MIN.
                 ARSENIC     1314              AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER    257.02    BACKGROUND SPACING:
                 ANTIMONY  149.64       COPPER    25
                 ARSENIC    31.07       ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   3JAN80 0337:16

RF   PB   626-3

SAMPLE TIME		2JAN80 1033:00	LOCATION	AFFRI		
ACQUISITION TIME		3JAN80 0005:33	TYPE	7.5MIN.		
PRESET TIME	300 SEC		GEOMETRY	SHELF 1	0.250	
ELAPSED TIME	308 SEC		VOLUME	UG	9583.000	
LIVE TIME	300 SEC		DETECTOR	GELI 15		

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                             OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	64	67	65	74	80	55	58
1002	69	72	64	68	52	64	65
1009	57	42	65	70	69	70	85
1016	102	137	220	316	470	672	832
1023	884	856	669	431	295	161	93
1030	92	63	47	69	59	64	70
1037	37	44	46	53	54	39	58
1044	56	56	55	44	41	60	52

PERCENT COPPER   .0745
   % RSD COUNTING   1.6

1101	65	48	61	61	48	64	67
1108	59	69	66	63	70	55	74
1115	67	73	84	125	129	126	112
1122	119	148	269	567	1628	4006	7665
1129	10201	9889	6483	2861	898	219	52
1136	22	20	16	17	15	15	17
1143	10	15	9	18	17	15	13
1150	13	16	8	20	18	19	16

PERCENT ANTIMONY   .6814
   % RSD COUNTING   .4

1288	16	11	9	22	31	30	32
1295	16	19	21	14	9	11	11
1302	16	7	11	10	2	16	6
1309	9	12	11	6	10	7	9
1316	19	14	13	8	8	9	8
1323	9	8	7	13	4	10	5
1330	11	6	8	8	9	3	6
1337	8	10	13	9	6	8	11

PERCENT ARSENIC   .0018
   % RSD COUNTING   62.1

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1316	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	257.02	BACKGROUND SPACING:	
	ANTIMONY	149.64	COPPER	25
	ARSENIC	31.07	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

EXPERIMENT 1   3JAN80 0339:10

RF   PB   604-1

SAMPLE TIME	2JAN80 1033:00	LOCATION AFFRI
ACQUISITION TIME	3JAN80 0010:55	TYPE 7.5MIN.
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 321 SEC		VOLUME UG 8895.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

995	154	160	152	148	157	149	149
1002	137	153	170	162	140	176	134
1009	143	163	123	149	118	118	129
1016	143	135	145	152	160	204	222
1023	205	194	165	173	160	142	134
1030	152	130	137	134	132	138	129
1037	122	133	132	160	138	137	157
1044	111	133	141	164	139	139	118

PERCENT COPPER   .0054
    % RSD COUNTING   16.3

1101	164	151	140	168	156	173	166
1108	186	162	169	183	180	187	221
1115	345	597	1168	1852	2263	2014	1366
1122	752	548	835	2074	5377	12254	20688
1129	24924	21913	13275	5841	1764	478	179
1136	121	93	84	86	71	66	57
1143	74	52	57	58	49	51	43
1150	45	48	40	59	48	41	43

PERCENT ANTIMONY   1.7913
    % RSD COUNTING   .3

1287	23	24	32	40	53	77	83
1294	58	61	45	38	34	26	19
1301	35	22	26	24	23	18	23
1308	31	22	30	37	88	119	199
1315	252	254	185	98	53	37	32
1322	22	19	23	23	30	21	24
1329	25	30	32	38	44	31	26
1336	31	25	26	20	28	36	28

PERCENT ARSENIC   .1070
    % RSD COUNTING   3.5

CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY 149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   3JAN80 0341:03

RF   PB   604-2

SAMPLE TIME   2JAN80 1033:00   LOCATION   AFFRI
ACQUISITION TIME   3JAN80 0016:29   TYPE   7.5MIN.
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   320 SEC   VOLUME   UG   8567.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                             OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

    994   138   150   156   130   146   138   126
   1001   136   110   142   157   164   152   138
   1008   152   112   145   131   137   147   145
   1015   147   135   138   126   168   162   198
   1022   183   197   201   189   168   157   142
   1029   139   146   124   130   136   108   137
   1036   140   102   110   133   135   140   127
   1043   144   119   132   117   144   135   122
PERCENT COPPER   .0064
   % RSD COUNTING   14.0
   1101   160   146   160   153   169   143   135
   1108   180   163   169   182   181   170   215
   1115   328   561   1213   1846   2276   2005   1257
   1122   702   504   791   2059   5507   12110   20479
   1129   24482   21224   13027   5376   1756   436   170
   1136   129   95   82   81   77   63   61
   1143   63   65   46   58   65   46   43
   1150   45   47   47   44   49   36   41
PERCENT ANTIMONY   1.8251
   % RSD COUNTING   .3
   1287   36   31   40   30   46   85   70
   1294   66   39   37   42   43   39   29
   1301   25   27   29   26   25   19   27
   1308   27   29   23   36   77   126   188
   1315   219   223   187   93   62   24   19
   1322   32   36   31   23   17   25   20
   1329   26   37   36   37   45   33   19
   1336   29   26   26   19   21   25   19
PERCENT ARSENIC   .1005
   % RSD COUNTING   3.8
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   257.02   BACKGROUND SPACING:
                 ANTIMONY   149.64   COPPER   25
                 ARSENIC   31.07   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    3JAN80 0342:57

RF                      PB                      604-3

SAMPLE TIME             2JAN80 1033:00   LOCATION    AFFRI
ACQUISITION TIME        3JAN80 0022:03   TYPE        7.5MIN.
PRESET TIME     300 SEC                  GEOMETRY    SHELF 1      0.250
ELAPSED TIME    318 SEC                  VOLUME      UG          8064.000
LIVE TIME       300 SEC                  DETECTOR    GELI 15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH          0.500
                                         OFFSET          0.543

                    NORMALIZATION CONSTANTS      GAMMA
FWHM              5    A =    2.000         SLOPE        0.500 E-3
SENSITIVITY     16    B =   10.000         OFFSET       4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    994      132      127      113      135      115      127      121
   1001      134      129      115      138      126      135      129
   1008      121      123      136      125      115      131      119
   1015      133      114      118      133      139      160      180
   1022      158      190      162      164      137      105      119
   1029      123      119       96      127      119      113      109
   1036      115      114      124      109      126      109      129
   1043      116      104      119      111      134      104      109
PERCENT COPPER                            .0064
   % RSD COUNTING      14.0
   1101      128      139      143      130      128      125      130
   1108      125      154      140      152      136      152      214
   1115      254      492     1020     1653     2012     1829     1183
   1122      666      434      727     1824     4854    10814    18413
   1129    22826    19052    11725     4813     1427      390      160
   1136       89       78       62       56       55       59       64
   1143       55       44       42       45       49       41       40
   1150       46       36       46       33       31       45       23
PERCENT ANTIMONY                          1.7572
   % RSD COUNTING       .3
   1287       19       26       39       24       61       55       63
   1294       70       46       35       22       20       35       15
   1301       27       18       29       24       28       17       17
   1308       23       23       27       33       49      104      169
   1315      194      212      147       87       36       28       29
   1322       18       26       23       23       15       22       23
   1329       28       23       24       19       34       26       22
   1336       28       30       24       24       25       20       24
PERCENT ARSENIC                           .0924
   % RSD COUNTING       4.1
CENTROID CHANNEL COPPER      1022    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY    1129              SB-122   4043 MIN.
                 ARSENIC     1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER    257.02    BACKGROUND SPACING:
                 ANTIMONY  149.64       COPPER    25
                 ARSENIC    31.07       ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

8

Lab #
91190655 04

9th Irradiation
1/3/80

	UG	%CU	%SB	%AS
91119065 RF				
0299A	8652	.00474	.83564	.17136
0299B	7496	.00405	.77804	.15348
0299C	7104	.00356	.75794	.13575
0299D	8488	.00369	.80145	.15454
0299E	9429	.00280	.71636	.12901
0299F	7400	.00420	.80761	.15590
0299G	8548	.00520	.84527	.18781
0299H	11613	.00377	.71279	.13357
0299I	8924	.00407	.81676	.15967
0299J	9380	.00338	.71509	.13121
0299K	10683	.00484	.78590	.15672
0299L	8678	.00374	.78864	.14992
0299M	11207	.00438	.82346	.16796
0299N	10867	.00392	.80667	.16255
0299O	8090	.00386	.79660	.15389
0299Q	6876	.00526	.81897	.17144
0299R	10156	.00403	.83261	.16639
0299S	8534	.00276	.81951	.16763
0299T	10278	.00392	.80492	.15722
AVERAGE	9074	.0040	.7928	.1561
%RSD		16.87	5.10	9.82
91119065 RF				
0300A	10864	.00413	.76551	.16763
0300B	12114	.00402	.70063	.13358
0300C	12291	.00394	.69558	.12816
0300D	12815	.00364	.66051	.12217
0300E	11842	.00437	.73905	.14787
0300F	12242	.00371	.75620	.14395
0300G	12498	.00533	.81459	.18888
0300H	14446	.00372	.69664	.13280
0300I	13558	.00438	.72159	.15037
0300J	9751	.00230	.54487	.09137
0300K	12268	.00348	.71103	.13626
0300L	10572	.00435	.78435	.16748
0300M	11568	.00420	.77720	.16349
0300N	12941	.00321	.68751	.13823
0300O	12980	.00281	.68426	.14543
0300P	13991	.00334	.66194	.12766
0300Q	12153	.00327	.78332	.16960
0300R	12175	.00394	.67545	.12727
0300S	11803	.00351	.71330	.14103
0300T	14122	.00428	.77199	.16988
AVERAGE	12349	.0038	.7172	.1446
%RSD		17.24	8.47	15.25

9th irradiation
1/3/80

91119065 RF	UG	%CU	%SB	%AS
0301A	7810	.00336	.77697	.14538
0301B	9211	.00401	.78094	.15203
0301C	12480	.00298	.55439	.09606
0301D	10863	.00257	.56968	.09932
0301E	12396	.00389	.74467	.15361
0301F	9893	.00426	.83537	.17565
0301G	11926	.00401	.80098	.17009
0301H	10822	.00441	.76539	.16387
0301I	7031	.00319	.75361	.14730
0301J	11343	.00282	.74511	.14917
0301K	9602	.00491	.82051	.17838
0301L	12508	.00367	.82183	.16623
0301M	10895	.00225	.80753	.16510
0301N	9379	.00423	.68122	.12228
03010	9170	.00313	.75546	.15343
0301P	13733	.00398	.69209	.13449
0301Q	13599	.00241	.71398	.14150
0301R	11736	.00299	.61448	.10124
0301S	11794	.00351	.78629	.15667
0301T	11225	.00458	.76213	.14869
AVERAGE	10870	.0036	.7391	.1460
%RSD		19.18	10.88	16.68

	UG	%CU	%SB	%AS
91119065 RF				
0299P	7361	.00485	.81262	.15944
91119065 RF				
626A	8471	.07413	.73014	.00348
626B	9789	.07757	.71552	.00470
626C	8675	.08226	.71442	.00247
AVERAGE	8978	.0779	.7200	.0035
%RSD		5.23	1.21	31.36
91119065 RF				
604A	9802	.00904	1.93965	.10697
604B	14135	.00765	1.84400	.09942
604C	8347	.00878	1.74943	.09361
AVERAGE	10761	.0084	1.8443	.1000
%RSD		8.69	5.15	6.69

| | UG | %CU | %SB | %AS |

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0733:22

91119065 RF   PB   626A

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0329:46   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   308 SEC   VOLUME   UG   8471.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    973   56   71   58   65   55   52   56
    980   51   57   72   54   72   69   70
    987   56   65   57   47   80   56   68
    994   63   57   61   62   57   68   71
   1001   62   78   55   58   51   72   71
   1008   72   63   56   66   53   67   61
   1015   92   94   137   175   280   428   593
   1022   741   727   576   444   271   196   119
   1029   72   65   63   65   59   52   50
   1036   46   65   43   57   57   58   58
   1043   54   53   50   53   47   38   66
   1050   43   48   49   50   51   39   54
   1057   50   51   47   48   58   45   48
   1064   58   59   50   47   47   51   63

CNTS/MICROGRAM COPPER   243.85

COPPER IN STANDARD   .078%
CENTROID CHANNEL   1022
HALF-LIFE CU-64   768 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS.
    E=2.7183
    LN2=.69315
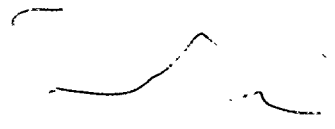
```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0735:00

91119065 RF              PB                      626B

SAMPLE TIME             3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME        4JAN80 0335:08   TYPE       5 MIN
PRESET TIME      300 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME     310 SEC                 VOLUME     UG        9789.000
LIVE TIME        300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH         0.500
                                         OFFSET         0.543

                        NORMALIZATION CONSTANTS   GAMMA
FWHM               5    A =    2.000     SLOPE          0.500 E-3
SENSITIVITY       16    B =   10.000     OFFSET         4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)   80.00

     973       63       73       86       73       73       76       84
     980       72       91       63       68       78       63       76
     987       69       73       66       53       78       87       68
     994       63       70       71       69       70       82       63
    1001       72       74       72       65       81       62       74
    1008       87       53       65       58       80       77       87
    1015       82      112      152      215      340      545      699
    1022      851      841      701      552      328      190      132
    1029       86       91       67       55       40       55       75
    1036       58       72       61       74       56       65       49
    1043       54       58       49       54       53       46       69
    1050       66       65       51       64       50       56       54
    1057       67       56       57       66       68       83       67
    1064       65       61       57       47       62       68       48
```

CNTS/MICROGRAM COPPER   255.14

```
COPPER IN STANDARD      .078%
CENTROID CHANNEL        1022
HALF-LIFE CU-64          768 MIN.
BACKGROUND SPACING        25
BACKGROUND CHANNELS       10
CONSTANTS:
    E=2.7183
  LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0736:36

91119065 RF              PB                       626C

SAMPLE TIME           3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME      4JAN80 0340:31    TYPE       5 MIN
PRESET TIME      300 SEC                GEOMETRY   SHELF 1       0.250
ELAPSED TIME     308 SEC                VOLUME     UG          8675.000
LIVE TIME        300 SEC                DETECTOR   GELI 15

CALIBRATION DATE      5OCT79 1357:49    KEV/CH         0.500
                                        OFFSET         0.543

                      NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =     2.000            SLOPE        0.500 E-3
SENSITIVITY       16    B =    10.000            OFFSET       4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE    1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    974       67        66        49        61        69        56        65
    981       63        56        71        71        64        65        61
    988       52        78        81        71        65        62        61
    995       64        58        68        65        57        79        59
   1002       49        60        59        53        77        53        62
   1009       52        72        70        59        49        59        86
   1016       82       122       219       327       465       633       767
   1023      801       699       525       335       209       136        95
   1030       53        52        54        50        55        49        54
   1037       46        54        40        48        49        38        50
   1044       39        54        50        47        51        52        48
   1051       67        37        45        44        67        50        51
   1058       51        52        50        48        61        47        59
   1065       52        58        54        52        43        45        56


CNTS/MICROGRAM COPPER          270.56



COPPER IN STANDARD     .078%
CENTROID CHANNEL        1023
HALF-LIFE CU-64          768 MIN.
BACKGROUND SPACING        25
BACKGROUND CHANNELS       10
CONSTANTS:
    E=2.7183
   LN2=.69315


    AVG.    CNTS/UG COPPER        256.52
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0737:49

91119065 RF   PB   626A

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0329:46   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   308 SEC   VOLUME   UG   8471.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   1080   49   47   41   58   52   56   44
   1087   55   56   43   53   54   58   48
   1094   55   53   38   69   55   68   62
   1101   52   66   59   68   48   60   68
   1108   65   75   63   72   75   62   68
   1115   74   80   85   149   138   137   119
   1122   111   144   307   768   2085   4967   8829
   1129   11293   9633   5525   2046   568   101   37
   1136   27   19   25   12   20   21   15
   1143   14   23   19   11   11   20   21
   1150   15   10   17   11   16   8   10
   1157   12   9   12   8   12   12   16
   1164   19   14   13   13   11   11   6
   1171   12   10   16   9   9   11   19

CMTS/MICROGRAM ANTIMONY   170.55

ANTIMONY IN STANDARD   .72%
CENTROID CHANNEL   1129
HALF-LIFE SB-122   4032 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
   LN2=.69315

EXPERIMENT 1   4JAN80 0739:27

91119065 RF   PB   626B

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0335:08   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   310 SEC   VOLUME   UG   9789.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

                     NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

    1080   46   62   79   78   78   59   49
    1087   54   60   84   52   77   79   44
    1094   54   72   53   67   64   64   76
    1101   63   75   68   55   55   60   61
    1108   85   63   63   69   69   71   78
    1115   99   95   110   138   172   148   129
    1122   152   190   324   896   2441   5822   10315
    1129   12474   10739   5983   2408   636   133   57
    1136   21   28   32   25   17   18   21
    1143   14   20   13   19   16   14   11
    1150   25   21   13   15   14   13   11
    1157   15   13   16   7   20   15   14
    1164   15   11   10   14   16   18   17
    1171   15   13   17   13   17   11   21

CNTS/MICROGRAM ANTIMONY   167.13

ANTIMONY IN STANDARD   .72%
CENTROID CHANNEL   1129
HALF-LIFE SB-122   4032 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
    LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0741:03

91119065 RF   PB   626C

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0340:31   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   308 SEC   VOLUME   UG   8675.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

     1080   51   53   44   63   62   51   56
     1087   48   49   55   51   62   53   41
     1094   64   57   68   60   46   56   61
     1101   58   52   55   64   72   60   77
     1108   71   76   65   51   77   74   81
     1115   64   76   96   138   161   119   132
     1122   142   158   291   762   2026   4993   8816
     1129   11225   9589   5588   2160   630   145   41
     1136   21   18   21   15   26   18   12
     1143   14   15   10   18   15   17   15
     1150   13   14   17   16   13   14   18
     1157   14   16   9   15   14   9   23
     1164   6   14   11   16   13   12   8
     1171   14   14   6   14   16   18   10

CNTS/MICROGRAM ANTIMONY   166.98

ANTIMONY IN STANDARD   .72%
CENTROID CHANNEL   1129
HALF-LIFE SB-122   4032 MIN.
BACKGROUND SPACING   25
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7182
   LN2=.69315

AVG.   CNTS/UG ANTIMONY   168.18

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0742:16

91119065 RF   PB   604A

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0345:53   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   328 SEC   VOLUME   UG   9802.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

    1266   51   40   36   51   40   48   49
    1273   68   54   40   45   50   54   51
    1280   49   45   38   36   51   45   36
    1287   41   47   49   51   72   103   116
    1294   97   58   45   47   59   44   43
    1301   46   44   34   38   39   31   35
    1308   40   40   40   51   93   185   255
    1315   310   283   221   90   61   37   32
    1322   38   32   28   33   34   41   39
    1329   37   39   41   43   46   48   44
    1336   43   30   32   38   43   33   35
    1343   41   32   37   37   27   36   33
    1350   37   28   41   37   33   38   28
    1357   32   34   32   32   25   27   36

CNTS/MICROGRAM ARSENIC   37.33

ARSENIC IN STANDARD   .10%
CENTROID CHANNEL   1315
HALF-LIFE AS-76   1584 MIN.
BACKGROUND SPACING   10
BACKGROUND CHANNELS   10
CONSTANTS:
    E=2.7183
    LN2=.69315

EXPERIMENT 1   4JAN80 0743:53

91119065 RF   PB   604B

SAMPLE TIME		3JAN80 1135:00	LOCATION	AFRRI I	
ACQUISITION TIME		4JAN80 0351:34	TYPE	5 MIN	
PRESET TIME	300 SEC		GEOMETRY	SHELF 1	0.250
ELAPSED TIME	339 SEC		VOLUME	UG	14135.000
LIVE TIME	300 SEC		DETECTOR	GELI 15	

CALIBRATION DATE	5OCT79 1357:49	KEV/CH	0.500
		OFFSET	0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

1266	68	69	77	67	73	77	65
1272	87	66	78	85	68	67	94
1280	77	66	63	62	53	60	73
1287	60	55	72	101	120	156	135
1294	142	89	69	77	63	53	61
1301	62	56	56	58	52	56	61
1308	66	73	72	108	163	277	372
1315	431	364	240	141	88	66	44
1322	38	56	63	66	41	48	69
1329	57	60	66	82	65	72	58
1336	64	59	51	67	63	47	57
1343	50	43	45	51	45	52	40
1350	64	50	61	50	48	38	46
1357	52	64	61	61	39	67	44

CNTS/MICROGRAM ARSENIC   34.70

ARSENIC IN STANDARD	.10%
CENTROID CHANNEL	1315
HALF-LIFE AS-76	1584 MIN.
BACKGROUND SPACING	10
BACKGROUND CHANNELS	10

CONSTANTS:
    E=2.7183
    LN2=.69315

EXPERIMENT 1   4JAN80 0745:27

91119065 RF   PB   604C

SAMPLE TIME		3JAN80 1135:00	LOCATION	AFRRI I	
ACQUISITION TIME		4JAN80 0357:27	TYPE	5 MIN	
PRESET TIME	300 SEC		GEOMETRY	SHELF 1	0.250
ELAPSED TIME	321 SEC		VOLUME	UG	8347.000
LIVE TIME	300 SEC		DETECTOR	GELI 15	

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                             OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

1266	29	38	28	42	27	35	21
1273	42	32	36	40	36	39	36
1280	37	31	29	31	23	24	30
1287	46	31	31	46	70	82	86
1294	68	60	26	31	31	30	17
1301	30	28	28	30	28	29	25
1308	24	16	27	42	58	145	197
1315	233	210	164	69	35	33	14
1322	27	29	22	22	32	26	24
1329	28	32	36	45	49	30	26
1336	26	37	19	28	29	17	38
1343	23	29	10	25	23	21	20
1350	26	25	19	18	20	29	23
1357	26	17	31	31	28	21	30

CNTS/MICROGRAM ARSENIC   32.67

ARSENIC IN STANDARD	.10%
CENTROID CHANNEL	1315
HALF-LIFE AS-76	1584 MIN.
BACKGROUND SPACING	10
BACKGROUND CHANNELS	10

CONSTANTS:
    E=2.7183
    LN2=.69315

AVG.   CNTS/UG ARSENIC   34.90

EXPERIMENT 1   4JAN80 0746:37

91119065 RF   PB   Q299A

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   3JAN80 2201:29   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   314 SEC   VOLUME   UG   8653.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                   NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER 1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

995	89	84	93	107	104	107	90
1002	90	92	98	102	118	74	87
1009	82	101	94	99	99	96	87
1016	87	96	85	103	113	146	127
1023	170	156	128	111	105	91	87
1030	87	92	101	85	88	79	94
1037	92	94	91	81	98	96	84
1044	96	82	95	101	75	73	92

PERCENT COPPER   .0047
   % RSD COUNTING   13.3

1101	102	108	113	92	91	100	97
1108	105	110	122	123	137	144	193
1115	415	900	2107	3607	4396	3647	2297
1122	1023	446	493	1111	2874	6596	11299
1129	13816	11352	6510	2582	682	189	76
1136	52	52	50	32	44	34	48
1143	40	52	43	42	34	28	37
1150	31	34	28	29	33	28	25

PERCENT ANTIMONY   .8356
   % RSD COUNTING   .4

1287	27	20	28	30	36	50	38
1294	56	34	21	22	20	23	28
1301	26	20	18	22	25	17	21
1308	19	23	27	48	90	196	351
1315	504	465	323	168	64	29	10
1322	14	17	20	19	12	17	22
1329	20	23	33	52	41	40	30
1336	17	15	13	16	14	15	18

PERCENT ARSENIC   .1713
   % RSD COUNTING   2.4

CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1 4JAN80 0748:39

91119065 RF   PB   Q299B

```
SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         3JAN80 2206:56    TYPE       5 MIN
PRESET TIME       300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME      311 SEC                  VOLUME     UG        7496.000
LIVE TIME         300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH        0.500
                                           OFFSET        0.543


                    NORMALIZATION CONSTANTS    GAMMA
FWHM               5   A =    2.000         SLOPE        0.500 E-3
SENSITIVITY       16   B =   10.000         OFFSET       4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE       1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%)   80.00

   995     81    103     71     68     74     80     88
  1002     68     62     89     68     71     85     86
  1009     73     76     66     77     97     62     69
  1016     75     82     72     69     92     98    113
  1023    135    116     97     99     89     86     75
  1030     74     74     77     87     71     86     81
  1037     69     61     75     64     83     73     63
  1044     71     82     68     81     69     77     65
```

PERCENT COPPER   .0040
```
   % RSD COUNTING       16.1
  1101     66     86     77     86     77     81     75
  1108     81     94     99     98    100    110    158
  1115    306    701   1549   2892   3590   3109   1861
  1122    820    354    376    800   2260   5059   8849
  1129  11046   9394   5578   2159    593    132     64
  1136     37     43     29     29     31     32     29
  1143     36     40     36     38     26     16     26
  1150     22     17     28     21     17     17     28
```

PERCENT ANTIMONY   .7780
```
   % RSD COUNTING        .4
  1287     16     13     20     17     29     25     36
  1294     36     33     20     11     12     20     20
  1301     18     15     17     14     13     16     13
  1308     17     19     18     42     76    130    283
  1315    383    350    272    120     53     19     22
  1322     15     12      8     13     12     14     17
  1329     18     31     38     38     36     17     24
  1336     15     26     15     10     13     14     17
```

PERCENT ARSENIC   .1534
```
   % RSD COUNTING        2.7
CENTROID CHANNEL COPPER        1023    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51    BACKGROUND SPACING:
                 ANTIMONY    168.17       COPPER    25
                 ARSENIC      34.89       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0750:33

91119065 RF          PB                    0299C

SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         3JAN80 2212:20    TYPE       5 MIN
PRESET TIME       300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME      310 SEC                  VOLUME     UG        7104.000
LIVE TIME         300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH           0.500
                                           OFFSET           0.543

                    NORMALIZATION CONSTANTS     GAMMA
FWHM              5    A =    2.000         SLOPE         0.500 E-3
SENSITIVITY      16    B =   10.000         OFFSET        4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00

    995       65       63       73       79       66       82       71
   1002       75       77       72       62       68       60       65
   1009       58       77       65       64       60       74       78
   1016       66       59       73       88       97       80      101
   1023       98      102       91       90       64       76       74
   1030       70       57       69       61       47       69       53
   1037       75       60       68       70       60       63       71
   1044       55       62       69       59       72       63       54
PERCENT COPPER                              .0035
   % RSD COUNTING     18.4
   1101       70       88       65       69       75       91       72
   1108       68       88       97       84       86      104      147
   1115      276      629     1397     2414     2973     2713     1595
   1122      699      320      349      718     1932     4552     8072
   1129    10249     8831     5152     2113      569      134       41
   1136       33       37       26       30       34       31       23
   1143       30       20       25       25       16       15       14
   1150       21       34       18       18       21       20       17
PERCENT ANTIMONY                            .7579
   % RSD COUNTING      .5
   1287        9       26        9       15       14       35       33
   1294       28       29       14       11       15       16        9
   1301       22       12       14       15       15       10       22
   1308       20       13       20       29       61      118      228
   1315      316      293      251      108       46       19        6
   1322       13       18       12       14       16       11       10
   1329       15       22       33       35       34       25       20
   1336       18       14        8       13       12       14        8
PERCENT ARSENIC                             .1357
   % RSD COUNTING      3.0
CENTROID CHANNEL COPPER         1023    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY       1129              SB-122   4043 MIN.
                 ARSENIC        1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER       256.51    BACKGROUND SPACING:
                 ANTIMONY     168.17       COPPER    25
                 ARSENIC       34.89       ANTIMONY  25
CONSTANTS:                                 ARSENIC   10
   E=2.7183                             BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   4JAN80 0752:26

91119065 RF   PB   Q299D

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I	
ACQUISITION TIME	3JAN80 2217:43	TYPE	5 MIN	
PRESET TIME	300 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	313 SEC	VOLUME	UG	8488.000
LIVE TIME	300 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B = 10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	105	101	99	96	85	72	68
1002	73	101	87	92	85	97	102
1009	88	90	93	99	101	86	82
1016	89	86	109	99	97	147	137
1023	128	134	115	104	92	90	83
1030	80	74	74	95	75	89	78
1037	91	89	85	86	82	94	91
1044	74	88	96	94	96	81	89

PERCENT COPPER   .0037
% RSD COUNTING   17.1

1101	89	103	76	88	88	91	114
1108	100	95	106	101	120	150	204
1115	379	843	1843	3265	3980	3422	2024
1122	924	419	428	1025	2732	6095	10713
1129	12821	10777	6166	2313	723	183	73
1136	40	52	31	50	23	29	40
1143	54	32	41	35	33	27	35
1150	35	34	28	30	31	31	23

PERCENT ANTIMONY   .8014
% RSD COUNTING   .4

1287	17	17	23	20	43	42	48
1294	42	30	29	26	31	21	10
1301	19	12	15	25	23	17	17
1308	15	20	16	38	80	174	359
1315	435	373	287	139	64	30	17
1322	10	19	13	18	14	11	17
1329	18	34	34	54	32	29	19
1336	19	12	21	29	21	18	11

PERCENT ARSENIC   .1545
% RSD COUNTING   2.5

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:	
	ANTIMONY	168.17	COPPER	25
	ARSENIC	34.89	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

EXPERIMENT 1   4JAN80 0754:20

91119065 RF   PB   0299E

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I
ACQUISITION TIME	3JAN80 2223:09	TYPE	5 MIN
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	312 SEC	VOLUME	UG 9429.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	87	98	111	90	82	91	90
1002	100	88	85	77	91	79	88
1009	83	94	93	89	88	94	106
1016	99	102	97	99	113	110	116
1023	116	133	123	101	89	83	106
1030	79	84	75	79	66	81	77
1037	78	62	81	87	78	88	81
1044	93	83	75	90	90	88	75

PERCENT COPPER   .0028
% RSD COUNTING   20.0

1101	106	109	98	81	92	112	94
1108	76	94	100	101	116	100	188
1115	344	778	1723	3121	3823	3318	2009
1122	855	408	395	976	2606	5963	10421
1129	13036	10604	6172	2419	689	138	70
1136	48	37	35	30	26	31	33
1143	27	32	30	36	31	35	25
1150	29	29	21	32	25	25	21

PERCENT ANTIMONY   .7163
% RSD COUNTING   .4

1287	22	17	22	19	29	27	38
1294	39	29	30	25	26	22	18
1301	18	23	20	21	17	16	23
1308	23	19	26	51	83	157	297
1315	394	385	269	138	45	25	18
1322	9	17	17	12	16	21	22
1329	19	34	39	44	47	36	13
1336	18	19	20	10	5	13	19

PERCENT ARSENIC   .1298
% RSD COUNTING   2.6

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:	
	ANTIMONY	168.17	COPPER	25
	ARSENIC	34.89	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS	10
LN2=.69315				

EXPERIMENT 1   4JAN80 0756:13

91119065 RF   PB   0299F

```
SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         3JAN80 2228:35    TYPE       5 MIN
PRESET TIME       300 SEC                  GEOMETRY   SHELF 1      0.250
ELAPSED TIME      311 SEC                  VOLUME     UG        7400.000
LIVE TIME         300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH          0.500
                                           OFFSET          0.543

                   NORMALIZATION CONSTANTS     GAMMA
FWHM              5    A =     2.000         SLOPE       0.500 E-3
SENSITIVITY      16    B =    10.000         OFFSET      4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00

    994       77       84       72       68       71       73       88
   1001       99       74       68       65       65       70       77
   1008      100       78       70       74       81       72       74
   1015       83       76       68       82       98       90      119
   1022      123      113      101       85       86       80       79
   1029       67       74       82       76       62       65       88
   1036       67       90       76       82       71       63       73
   1043       88       74       70       66       78       72       71
```

PERCENT COPPER   .0042
```
    % RSD COUNTING        15.8
   1101       79       87       77       90       85       78       95
   1108       86       96       94      105      112      116      158
   1115      269      688     1526     2688     3317     3013     1780
   1122      732      358      348      910     2215     5240     9103
   1129    11265     9703     5592     2142      567      151       47
   1136       45       43       25       30       33       22       40
   1143       36       26       24       32       21       25       20
   1150       28       31       18       19       22       15       24
```

PERCENT ANTIMONY   .8076
```
    % RSD COUNTING         .4
   1287       17       19       21       19       30       34       35
   1294       32       22       20       17       17       14       22
   1301       14       20       17       23       15       16       18
   1308       13       17       28       37       70      181      265
   1315      368      359      259      117       54       24        8
   1322       13       11       12       17       11       14       12
   1329       21       30       34       32       31       25       11
   1336       19       19       12       14       12       20       14
```

PERCENT ARSENIC   .1559
```
    % RSD COUNTING       2.7
CENTROID CHANNEL COPPER        1022    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51    BACKGROUND SPACING:
                 ANTIMONY    168.17       COPPER    25
                 ARSENIC      34.89       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   4JAN80 0758:07

911:19065 RF   PB   0299G

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I
ACQUISITION TIME	3JAN80 2233:59	TYPE	5 MIN
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	314 SEC	VOLUME	UG 8548.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE	5OCT79 1357:49	KEV/CH	0.500
		OFFSET	0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B = 10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	94	92	84	101	101	110	102
1002	84	101	105	103	97	101	102
1009	91	97	87	94	88	90	97
1016	100	102	110	111	126	150	138
1023	153	143	132	117	105	99	106
1030	97	84	103	91	98	86	97
1037	92	95	98	96	96	95	83
1044	105	96	102	78	84	96	72

PERCENT COPPER   .0052
% RSD COUNTING   12.7

1101	130	98	96	101	115	124	135
1108	110	117	132	130	146	158	246
1115	435	1023	2372	3824	4906	4072	2346
1122	1043	456	519	1151	3030	6518	11422
1129	13615	11052	6584	2498	696	202	75
1136	59	40	45	34	51	41	55
1143	54	37	47	38	40	31	29
1150	34	29	30	40	29	32	25

PERCENT ANTIMONY   .8452
% RSD COUNTING   .4

1287	23	14	23	25	30	48	43
1294	38	29	25	22	26	22	14
1301	20	20	28	27	22	17	24
1308	28	30	37	46	96	221	388
1315	504	513	337	187	50	35	19
1322	17	17	15	17	27	17	20
1329	26	25	44	62	61	36	28
1336	29	23	17	25	21	23	23

PERCENT ARSENIC   .1878
% RSD COUNTING   2.3

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.	
	ANTIMONY	1129	SB-122	4043 MIN.	
	ARSENIC	1315	AS-76	1584 MIN.	
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:		
	ANTIMONY	168.17	COPPER	25	
	ARSENIC	34.89	ANTIMONY	25	
CONSTANTS:			ARSENIC	10	
E=2.7183			BACKGROUND CHANNELS 10		
LN2=.69315					

EXPERIMENT 1   4JAN80 0800:00

91119065 RF   PB   0299H

```
SAMPLE TIME              3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME         3JAN80 2239:27   TYPE       5 MIN
PRESET TIME       300 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME      315 SEC                 VOLUME     UG       11613.000
LIVE TIME         300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49   KEV/CH        0.500
                                          OFFSET        0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000        SLOPE        0.500 E-3
SENSITIVITY      16    B =   10.000        OFFSET       4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00
```

```
  994    107     97    112    101    113    105    109
 1001    119    100    109    103    125    148    114
 1008    106    100    108    109    106     99     98
 1015    113    126    103    111    120    119    160
 1022    164    152    153    130    117    115    105
 1029     95    106     87    110     93    106     85
 1036     96     89    100     85     97     94     99
 1043    104    103     87    116     86     94     74
```
PERCENT COPPER   .0037
```
   % RSD COUNTING        13.3
 1101    102    123    100    121    106    119    114
 1108    114    125    122    130    139    152    218
 1115    415    997   2204   3710   4384   3750   2238
 1122    959    481    589   1298   3441   7638  12856
 1129  15512  12786   7489   2880    765    212     94
 1136     63     46     45     50     37     54     56
 1143     53     60     50     35     45     33     35
 1150     31     37     44     39     33     40     33
```
PERCENT ANTIMONY   .7128
```
   % RSD COUNTING         .4
 1287     15     25     25     26     45     52     54
 1294     47     34     29     30     21     24     21
 1301     45     21     17     22     20     12     14
 1308     22     20     30     62    117    242    379
 1315    480    445    334    163     56     34     21
 1322     18     23     28     14     22     25     16
 1329     22     47     35     42     55     37     23
 1336     25     19     15     23     13     22     21
```
PERCENT ARSENIC   .1335
```
   % RSD COUNTING         2.3
CENTROID CHANNEL COPPER       1022   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1129             SB-122   4043 MIN.
                 ARSENIC      1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17      COPPER    25
                 ARSENIC     34.89      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
  E=2.7183                           BACKGROUND CHANNELS 10
  LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0801:53

91119065 RF   PB   Q299I

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   3JAN80 2244:56   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   314 SEC   VOLUME   UG   8924.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

   994   109   109   90   113   85   111   98
  1001   83   105   77   71   96   92   94
  1008   102   102   92   99   89   118   91
  1015   97   77   98   99   118   112   138
  1022   141   138   139   136   114   97   93
  1029   102   89   94   95   93   89   83
  1036   83   97   77   93   99   99   73
  1043   95   91   85   85   101   70   104
PERCENT COPPER   .0040
   % RSD COUNTING   15.6
  1101   86   81   95   104   123   96   98
  1108   98   125   120   117   118   140   204
  1115   431   957   2018   3480   4353   3692   2239
  1122   928   424   471   1115   2824   6610   11394
  1129   13602   11486   6577   2560   703   165   90
  1136   48   54   34   30   39   46   60
  1143   43   40   45   35   36   28   35
  1150   26   25   32   27   28   26   23
PERCENT ANTIMONY   .8167
   % RSD COUNTING   .4
  1287   24   27   19   24   41   50   54
  1294   39   26   23   27   24   25   24
  1301   11   18   16   19   25   22   23
  1308   22   28   30   48   70   198   343
  1315   463   473   302   148   64   29   17
  1322   19   22   23   16   12   27   20
  1329   37   30   29   53   42   32   19
  1336   18   16   14   17   14   18   7
PERCENT ARSENIC   .1596
   % RSD COUNTING   2.4
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   4JAN80 0803:47

91119065 RF   PB   Q299J

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I	
ACQUISITION TIME	3JAN80 2250:23	TYPE	5 MIN	
PRESET TIME	300 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	312 SEC	VOLUME	UG	9380.000
LIVE TIME	300 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                        OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

994	84	88	101	89	98	94	103
1001	73	94	79	83	92	85	76
1008	79	90	72	78	95	80	86
1015	84	82	92	98	93	127	116
1022	130	127	128	99	93	100	88
1029	92	72	78	70	91	83	79
1036	87	73	84	71	85	80	65
1043	106	76	79	86	76	66	78

PERCENT COPPER   .0033
   % RSD COUNTING   17.0

1101	87	110	84	108	112	83	124
1108	86	106	98	108	92	135	181
1115	360	774	1702	2895	3780	3288	1990
1122	841	361	404	964	2584	5925	10379
1129	12551	10503	6240	2467	656	176	63
1136	47	45	40	32	32	33	36
1143	30	45	41	36	33	17	35
1150	32	30	30	31	21	32	27

PERCENT ANTIMONY   .7151
   % RSD COUNTING   .4

1287	22	12	19	28	26	36	48
1294	33	31	19	22	14	20	25
1301	19	16	18	23	22	15	22
1308	17	22	27	56	75	161	289
1315	415	376	258	148	59	15	18
1322	19	12	18	14	19	16	17
1329	16	20	31	40	49	33	22
1336	14	11	13	13	13	14	13

PERCENT ARSENIC   .1312
   % RSD COUNTING   2.6

CENTROID CHANNEL	COPPER	1022	HALF-LIFE CU-64	768 MIN.	
	ANTIMONY	1129	SB-122	4043 MIN.	
	ARSENIC	1315	AS-76	1584 MIN.	
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:		
	ANTIMONY	168.17	COPPER	25	
	ARSENIC	34.89	ANTIMONY	25	
CONSTANTS:			ARSENIC	10	
E=2.7183			BACKGROUND CHANNELS 10		
LN2=.69315					

EXPERIMENT 1   4JAN80 0805:40

91119065 RF   PB   0299K

SAMPLE TIME	3JAN80 1135:00	LOCATION AFRRI I
ACQUISITION TIME	3JAN80 2255:49	TYPE 5 MIN
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 316 SEC		VOLUME UG 10683.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM 5	A = 2.000	SLOPE 0.500 E-3
SENSITIVITY 16	B = 10.000	OFFSET 4.500
LIBRARY NUMBER 1	ENERGY TOLERANCE 1.25	
HALF-LIFE RATIO 8	ABUNDANCE LIMIT (%) 80.00	

995	118	108	116	127	114	109	109
1002	105	108	122	103	105	121	129
1009	119	127	91	104	106	104	126
1016	107	126	121	142	131	181	178
1023	181	170	124	147	127	104	107
1030	115	115	108	105	89	106	100
1037	100	103	98	83	94	109	116
1044	105	93	95	88	102	100	116

PERCENT COPPER   .0048
% RSD COUNTING   12.0

1101	110	116	90	123	129	112	124
1108	122	102	130	122	152	172	259
1115	480	1118	2498	4054	4973	4185	2371
1122	1087	529	575	1293	3519	7751	13214
1129	15636	12929	7363	2903	755	168	104
1136	61	58	54	46	51	49	51
1143	52	52	51	48	47	32	29
1150	39	50	39	38	37	38	37

PERCENT ANTIMONY   .7859
% RSD COUNTING   .4

1287	25	21	24	30	32	57	56
1294	44	22	35	24	23	21	28
1301	22	24	24	18	27	20	22
1308	24	27	28	56	109	226	389
1315	563	519	353	156	60	37	37
1322	18	20	24	15	21	20	17
1329	24	35	38	55	40	43	20
1336	16	16	21	25	18	25	18

PERCENT ARSENIC   .1567
% RSD COUNTING   2.2

CENTROID CHANNEL COPPER	1023	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1129	SB-122	4043 MIN.
ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	256.51	BACKGROUND SPACING:	
ANTIMONY	168.17	COPPER	25
ARSENIC	34.89	ANTIMONY	25

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   4JAN80 0807:34

91119065 RF   PB   0299L

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   3JAN80 2301:18   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   313 SEC   VOLUME   UG   8678.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                         NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

996	90	76	85	97	72	98	91
1003	86	88	91	89	80	78	82
1010	79	89	87	92	77	86	97
1017	89	91	80	97	132	134	129
1024	128	91	78	108	85	89	88
1031	78	87	80	77	72	82	74
1038	85	64	76	79	80	83	91
1045	95	88	89	73	89	65	78

PERCENT COPPER   .0037
    % RSD COUNTING   16.5

1101	105	95	93	94	111	102	105
1108	100	110	103	121	95	133	139
1115	325	800	1815	3051	3707	3277	2009
1122	846	400	440	1030	2578	6184	10547
1129	12651	10872	6330	2402	669	146	74
1136	48	38	46	37	33	34	32
1143	39	40	39	42	28	29	22
1150	31	27	26	23	32	26	24

PERCENT ANTIMONY   .7886
    % RSD COUNTING   .4

1287	18	15	19	26	22	34	40
1294	34	23	17	13	18	24	17
1301	14	14	15	19	23	18	14
1308	16	25	17	36	81	170	305
1315	414	407	289	123	48	15	8
1322	22	14	11	14	14	14	22
1329	22	28	32	45	39	38	21
1336	26	17	16	17	15	17	14

PERCENT ARSENIC   .1499
    % RSD COUNTING   2.5

CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY   25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0809:27

91119065 RF            PB                    Q299M

SAMPLE TIME            3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME       3JAN80 2306:44   TYPE       5 MIN
PRESET TIME     300 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME    318 SEC                 VOLUME     UG       11207.000
LIVE TIME       300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE      5OCT79 1357:49    KEV/CH        0.500
                                        OFFSET        0.543

                     .    NORMALIZATION CONSTANTS   GAMMA
FWHM              5    A =    2.000          SLOPE      0.500 E-3
SENSITIVITY     16    B =   10.000          OFFSET     4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE    1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    995       128       124       108       113       131       107       119
   1002       124       119       104       132       121       142       118
   1009       126       141       133       128       134       112       127
   1016       113       122       130       143       147       168       169
   1023       204   .   166       143       155       137       109       116
   1030       116       104       106       111       101       102       110
   1037       119       101       114       110       117        99       116
   1044       104       121       112       114       114       116       124
PERCENT COPPER                          . 0043
   % RSD COUNTING      13.1
   1101       123       138       119       146       136       138       146
   1108       142       136       146       161       150       201       267
   1115       556      1307      2793      4672      5673      4620      2725
   1122      1186       547       632      1509      3935      8872     14511
   1129     17308     14149      7786      2936       819       195        87
   1136        92        70        57        58        59        62        53
   1143        81        67        63        60        42        53        47
   1150        46        47        45        44        41        37        37
PERCENT ANTIMONY                        . 8234
   % RSD COUNTING       .3
   1287        17        27        32        40        44        47        54
   1294        49        46        33        19        30        21        31
   1301        29        26        31        33        25        26        31
   1308        30        24        32        75       118       269       451
   1315       580       571       413       214        96        21        29
   1322        20        38        27        18        23        21        26
   1329        21        48        63        66        47        37        30
   1336        21        16        20        22        28        21        34
PERCENT ARSENIC                         . 1679
   % RSD COUNTING       2.1
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64   .768 MIN.
                 ANTIMONY    1129             SB-122  4043 MIN.
                 ARSENIC     1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER    256.51  BACKGROUND SPACING:
                 ANTIMONY  168.17     COPPER    25
                 ARSENIC    34.89     ANTIMONY  25
CONSTANTS:                            ARSENIC   10
   E=2.7183                        BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0811:20

91119065 RF   PB   Q299N

```
SAMPLE TIME               3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME          3JAN80 2312:15    TYPE       5 MIN
PRESET TIME      300 SEC                     GEOMETRY   SHELF 1      0.250
ELAPSED TIME     317 SEC                     VOLUME     UG        10867.000
LIVE TIME        300 SEC                     DETECTOR   GELI 15

CALIBRATION DATE          5OCT79 1357:49     KEV/CH        0.500
                                             OFFSET        0.543

                       NORMALIZATION CONSTANTS   GAMMA
FWHM              5    A =    2.000           SLOPE        0.500 E-3
SENSITIVITY      16    B =   10.000           OFFSET       4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00
```

```
  995    115    138    112     99    129    100    113
 1002    108    100    114    106    119    115    124
 1009    119    118     96     96     92     94     99
 1016    109    116    125    137    140    170    175
 1023    155    145    130    151    128    109    113
 1030    105    102     84    131    101     92    107
 1037     92    119    110    120     97    113    108
 1044    120    113     98    103    109    104    114
```
PERCENT COPPER   .0039
    % RSD COUNTING   14.7
```
 1101    109    136    128    132    122    125    136
 1108    114    138    142    139    159    158    256
 1115    509   1182   2575   4230   5179   4292   2548
 1122   1091    513    600   1403   3723   8255  13909
 1129  16209  13387   7565   2890    790    210     97
 1136     60     71     57     37     39     42     47
 1143     58     71     46     38     44     39     38
 1150     38     26     39     39     30     34     39
```
PERCENT ANTIMONY   .8066
    % RSD COUNTING   .3
```
 1287     23     31     38     35     43     50     54
 1294     45     44     28     34     26     23     18
 1301     34     25     26     24     27     28     14
 1308     27     17     37     51    105    260    430
 1315    518    513    398    199     97     37     23
 1322     27     27     23     14     20     16     31
 1329     25     44     46     39     42     40     44
 1336     30     21     18     32     30     19     22
```
PERCENT ARSENIC   .1625
    % RSD COUNTING   2.2
```
CENTROID CHANNEL COPPER        1023    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51    BACKGROUND SPACING:
                 ANTIMONY    168.17        COPPER    25
                 ARSENIC      34.89        ANTIMONY  25
CONSTANTS:                                 ARSENIC   10
    E=2.7183                           BACKGROUND CHANNELS 10
    LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0813:14

91119065 RF            PB                    02990

SAMPLE TIME            3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME       3JAN80 2317:45   TYPE       5 MIN
PRESET TIME      300 SEC                GEOMETRY   SHELF 1      0.250
ELAPSED TIME     312 SEC                VOLUME     UG         8090.000
LIVE TIME        300 SEC                DETECTOR   GELI 15

CALIBRATION DATE       5OCT79 1357:49   KEV/CH        0.500
                                        OFFSET        0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =     2.000          SLOPE       0.500 E-3
SENSITIVITY     16   B =    10.000          OFFSET      4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

    993        85      83      77      86      92      94      82
   1000        89      79      78      85      80      97      84
   1007       105      88      90      88      70      85      77
   1014        76      79      92      84      94      86     108
   1021       109     136     131     127      78      93     105
   1028        76      99      82      86      71      66      90
   1035        69      82      75      73      88      73      82
   1042        75      80      79      76      80      71      88
PERCENT COPPER                           .0038
   % RSD COUNTING      17.3
   1101        75     101      98      84      89      79      94
   1108        95     109     103     111      95     131     174
   1115       354     764    1808    3115    3898    3381    2004
   1122       797     406     405     953    2558    5654    9843
   1129     12141   10063    5843    2321     625     129      46
   1136        35      29      35      36      34      41      30
   1143        38      43      37      31      25      32      37
   1150        26      23      31      30      28      22      27
PERCENT ANTIMONY                         .7966
   % RSD COUNTING       .4
   1287        13      16      17      22      29      34      38
   1294        34      24      15      27      25      21      15
   1301        14      17      21      18      19      22      16
   1308        15      14      24      44      78     147     271
   1315    .  406     397     300     126      53      29      17
   1322        18      16      18      15      16      23      16
   1329        28      37      35      46      33      35      26
   1336        16      18      12      14      22      18      23
PERCENT ARSENIC                          .1539
   % RSD COUNTING       2.6
CENTROID CHANNEL COPPER       1021   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY     1129             SB-122  4043 MIN.
                 ARSENIC      1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER     256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17      COPPER    25
                 ARSENIC     34.89      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0815:07

91119065 RF              PB                        Q2990

SAMPLE TIME              3JAN80 1135:00   LOCATION  AFRRI I
ACQUISITION TIME         3JAN80 2323:10   TYPE      5 MIN
PRESET TIME      300 SEC                  GEOMETRY  SHELF 1      0.250
ELAPSED TIME     310 SEC                  VOLUME    UG         6876.000
LIVE TIME        300 SEC                  DETECTOR  GELI 15

CALIBRATION DATE         5OCT79 1357:49   KEV/CH        0.500
                                          OFFSET        0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =     2.000       SLOPE         0.500 E-3
SENSITIVITY      16    B =    10.000       OFFSET        4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00

    995       71       77       86       63       67       65       86
   1002       76       74       73       69       83       68       65
   1009       74       81       64       88       73       70       79
   1016       74       76       86       77       98      104       86
   1023      114      109      105      100       79       72       73
   1030       70       77       81       66       65       73       76
   1037       84       74       58       77       67       74       81
   1044       89       77       53       53       72       72       65
PERCENT COPPER                       .0052
    % RSD COUNTING      14.0
   1101       71       89       71       91       92       87       74
   1108       88       89       81       76      112      107      157
   1115      242      669     1579     2747     3406     3048     1772
   1122      801      369      340      832     2138     4856     8655
   1129    10541     8940     5191     1960      532      130       46
   1136       27       44       27       35       28       34       23
   1143       28       39       27       24       24       25       23
   1150       21       36       19       26       27       10       20
PERCENT ANTIMONY                     .8189
    % RSD COUNTING       .4
   1287       11       12       11       24       20       38       33
   1294       35       27       28       15       24       15       19
   1301       17       12       10        8       18        7       17
   1308       21       18       23       26       73      153      261
   1315      384      366      227      133       46       20       12
   1322       18       14       16       13       10       15       13
   1329       22       28       31       32       40       26       19
   1336       12       14       13       18       20       11        9
PERCENT ARSENIC                      .1714
    % RSD COUNTING       2.7
CENTROID CHANNEL COPPER         1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY       1129             SB-122   4043 MIN.
                 ARSENIC        1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER       256.51   BACKGROUND SPACING:
                 ANTIMONY     168.17       COPPER    25
                 ARSENIC       34.89       ANTIMONY  25
CONSTANTS:                                 ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0817:01

91119065 RF   PB   Q299R

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   3JAN80 2328:34   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   316 SEC   VOLUME   UG   10156.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

  995   131   123   109   125   111   117   123
 1002   105   123   117   114   102   123   103
 1009   96   112   95   118   117   88   107
 1016   104   108   108   119   120   135   169
 1023   155   159   147   146   112   102   100
 1030   114   118   97   86   75   123   93
 1037   103   140   89   92   120   93   104
 1044   103   100   101   101   95   90   106
PERCENT COPPER   .0040
   % RSD COUNTING   15.2
 1101   114   120   115   121   112   133   133
 1108   131   139   126   161   156   177   253
 1115   466   1165   2525   4068   4965   4130   2407
 1122   1054   500   583   1457   3600   8011   13138
 1129   15621   13054   7195   2805   723   217   80
 1136   55   74   62   46   48   47   54
 1143   48   52   52   42   31   36   44
 1150   39   30   46   42   30   30   34
PERCENT ANTIMONY   .8326
   % RSD COUNTING   .4
 1287   15   17   24   35   31   41   48
 1294   47   45   27   23   31   25   23
 1301   25   20   29   21   29   21   25
 1308   26   30   35   39   92   224   404
 1315   539   560   330   180   57   32   33
 1322   22   22   25   27   22   26   24
 1329   27   36   44   53   56   36   28
 1336   22   19   16   18   22   19   22
PERCENT ARSENIC   .1664
   % RSD COUNTING   2.3
CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   4JAN80 0818:54

91119065 RF   PB   Q2995

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   3JAN80 2334:03   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   313 SEC   VOLUME   UG   8534.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)   80.00

995	81	121	97	93	99	88	94
1002	79	106	101	89	91	89	89
1009	80	91	96	90	81	94	98
1016	86	75	101	102	109	97	121
1023	136	123	119	110	107	72	93
1030	93	80	77	90	99	85	85
1037	94	85	67	87	83	73	82
1044	95	85	75	89	91	89	96

PERCENT COPPER   .0027
  % RSD COUNTING   24.2

1101	96	97	103	110	90	103	85
1108	96	101	120	119	138	132	201
1115	413	879	1993	3491	4231	3660	2082
1122	889	439	432	1054	2733	6415	10892
1129	12968	10849	6150	2400	585	169	62
1136	44	36	39	38	35	46	31
1143	37	44	34	38	30	33	35
1150	31	29	29	35	25	30	31

PERCENT ANTIMONY   .8195
  % RSD COUNTING   .4

1287	22	17	25	26	39	42	55
1294	23	28	19	19	27	20	23
1301	18	20	15	17	20	16	25
1308	16	22	27	36	75	196	322
1315	449	444	295	162	63	22	16
1322	15	17	17	13	21	14	20
1329	25	25	38	46	30	34	22
1336	26	10	12	17	16	18	14

PERCENT ARSENIC   .1676
  % RSD COUNTING   2.4

CENTROID CHANNEL COPPER   1023   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0820:48

91119065 RF            PB                        0299T

SAMPLE TIME             3JAN80 1135.00    LOCATION   AFRRI I
ACQUISITION TIME        3JAN80 2339:29    TYPE       5 MIN
PRESET TIME     300 SEC                   GEOMETRY   SHELF 1        0.250
ELAPSED TIME    315 SEC                   VOLUME     UG        10278.000
LIVE TIME       300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH         0.500
                                          OFFSET         0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM                5   A =    2.000       SLOPE          0.500 E-3
SENSITIVITY        16   B =   10.000       OFFSET         4.500
LIBRARY NUMBER      1   ENERGY TOLERANCE       1.25
HALF-LIFE RATIO     8   ABUNDANCE LIMIT (%)   80.00

    995      110      110       84      108      108       92      122
   1002      111      114      114       97      120       84      119
   1009      107      110       94      104      102      124      113
   1016      105      106      129      123      127      142      155
   1023      143      144      138      125      101      109       95
   1030      114      105      105       89      108      100       88
   1037       96       90      104      102      102       77      107
   1044      135      115      105      108       99      105       88
PERCENT COPPER                              .0039
    % RSD COUNTING       15.2
   1101       97      102      111      126      127      130      118
   1108      117      119      129      127      141      173      220
   1115      429     1100     2336     3862     4834     3992     2313
   1122      959      446      541     1316     3479     7686    12816
   1129    15394    12592     7196     2775      715      203       83
   1136       73       55       59       56       52       54       48
   1143       50       59       55       44       35       38       36
   1150       39       40       35       42       26       30       41
PERCENT ANTIMONY                            .8049
    % RSD COUNTING        .4
   1287       24       24       17       31       30       49       50
   1294       51       34       22       29       21       30       16
   1301       31       14       27       28       23       21       24
   1308       30       31       28       50      115      196      389
   1315      501      488      337      189       68       29       24
   1322       23       23       20       20       29       18       19
   1329       25       29       56       46       57       35       19
   1336       16       18       19       20       21       23       29
PERCENT ARSENIC                             .1572
    % RSD COUNTING        2.3
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129             SB-122   4043 MIN.
                 ARSENIC       1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51   BACKGROUND SPACING:
                 ANTIMONY    168.17       COPPER    25
                 ARSENIC      34.89       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0822:41

91119065 RF   PB   Q300A

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   3JAN80 2344:58   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   317 SEC   VOLUME   UG   10864.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

  994   122   111   102   122   129   112   121
 1001   123   127   117   116   107   125   114
 1008   103   120   129   97   100   92   99
 1015   125   102   118   140   147   118   156
 1022   173   161   146   167   129   116   117
 1029   109   103   118   92   116   101   105
 1036   101   97   115   119   107   99   82
 1043   106   106   122   85   109   114   93
PERCENT COPPER   .0041
  % RSD COUNTING   14.3
 1101   104   126   128   118   120   137   122
 1108   139   110   141   128   168   195   234
 1115   488   1168   2656   4407   5246   4265   2529
 1122   1112   529   617   1360   3612   8050 12961
 1129 15284 12629   7034   2672   709   184   83
 1136   61   62   57   67   44   53   67
 1143   63   59   59   57   43   26   41
 1150   34   47   38   38   42   35   36
PERCENT ANTIMONY   .7655
  % RSD COUNTING   .4
 1287   30   24   43   31   47   59   53
 1294   44   38   36   36   28   26   33
 1301   21   20   30   22   33   22   25
 1308   25   26   32   54   123   233   469
 1315   556   560   368   170   80   34   23
 1322   26   27   23   16   21   26   24
 1329   25   47   45   52   51   36   29
 1336   22   14   18   24   30   22   28
PERCENT ARSENIC   .1676
  % RSD COUNTING   2.2
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   4JAN80 0824:35

91119065 RF   PB   0300B

```
SAMPLE TIME              3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME         3JAN80 2350:28   TYPE       5 MIN
PRESET TIME     300 SEC                   GEOMETRY   SHELF 1       0.250
ELAPSED TIME    316 SEC                   VOLUME     UG      12114.000
LIVE TIME       300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49   KEV/CH         0.500
                                          OFFSET         0.543
```

```
                       NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2.000           SLOPE       0.500 E-3
SENSITIVITY      16   B =   10.000           OFFSET      4.500
LIBRARY NUMBER    1   ENERGY TOLERANCE    1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)  80.00
```

```
 995     112     110     101     119     103     107     102
1002      94      97     112      94     113     124     118
1009      96     103     117     114      98     105     102
1016     118     126     106     114     131     170     173
1023     184     135     149     134     117     105     118
1030      87     109     113     107     100     105     102
1037      98      96     107     108     109     115      89
1044     103     110     104     102     105     129      97
```
PERCENT COPPER   .0040
    % RSD COUNTING   13.2
```
1101     114     123     120     127     116     131     125
1108     119     131     141     128     156     187     251
1115     479    1118    2383    3957    4669    4100    2400
1122    1026     501     552    1451    3635    8147   13170
1129   15830   12726    7154    2790     697     180      73
1136      62      75      52      58      39      59      51
1143      45      49      55      51      55      40      47
1150      29      45      60      31      44      35      41
```
PERCENT ANTIMONY   .7006
    % RSD COUNTING   .4
```
1287      24      22      24      24      42      45      51
1294      54      38      34      32      25      36      22
1301      22      15      20      20      26      21      25
1308      32      27      39      61     123     217     382
1315     531     449     311     193      78      24      22
1322      21      18      30      19      17      34      21
1329      26      38      45      64      43      46      21
1336      23      26      23      17      16      29      22
```
PERCENT ARSENIC   .1335
    % RSD COUNTING   2.3
```
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129             SB-122  4043 MIN.
                 ARSENIC       1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      256.51   BACKGROUND SPACING:
                 ANTIMONY    168.17      COPPER    25
                 ARSENIC      34.89      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

EXPERIMENT 1   4JAN80 0826:28

91119065 RF   PB   Q300C

SAMPLE TIME	3JAN80 1135:00	LOCATION AFRRI I
ACQUISITION TIME	3JAN80 2355:58	TYPE 5 MIN
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 316 SEC		VOLUME UG 12291.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                   NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER 1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

995	110	108	96	122	111	115	112
1002	125	99	103	115	112	101	118
1009	99	112	111	102	120	115	100
1016	115	93	106	135	125	132	173
1023	161	151	164	137	116	105	120
1030	107	101	100	102	105	97	106
1037	97	111	89	100	85	116	90
1044	102	102	93	94	88	101	106

PERCENT COPPER   .0039
   % RSD COUNTING   13.1

1101	121	132	122	113	125	98	139
1108	145	126	130	133	144	190	237
1115	493	1060	2352	3816	4623	3839	2207
1122	1015	446	576	1470	3782	8054	13319
1129	15959	12820	7144	2742	797	212	100
1136	75	64	65	50	41	54	44
1143	39	56	44	36	36	30	40
1150	41	45	39	37	43	38	29

PERCENT ANTIMONY   .6955
   % RSD COUNTING   .4

1287	23	22	22	23	39	54	58
1294	56	36	33	19	28	35	29
1301	26	33	24	30	30	29	19
1308	25	30	44	48	112	246	392
1315	474	439	315	163	67	39	24
1322	19	14	22	18	16	19	15
1329	31	39	45	59	41	45	33
1336	16	20	22	23	24	22	11

PERCENT ARSENIC   .1281
   % RSD COUNTING   2.4

CENTROID CHANNEL COPPER	1023	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1129	SB-122	4043 MIN.
ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	256.51	BACKGROUND SPACING:	
ANTIMONY	168.17	COPPER 25	
ARSENIC	34.89	ANTIMONY 25	

CONSTANTS: ARSENIC 10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0828:22

91119065 RF              PB                      Q300D

SAMPLE TIME          3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME     4JAN80 0001:27    TYPE       5 MIN
PRESET TIME      300 SEC               GEOMETRY   SHELF 1      0.250
ELAPSED TIME     316 SEC               VOLUME     UG       12815.000
LIVE TIME        300 SEC               DETECTOR   GELI 15

CALIBRATION DATE     5OCT79 1357:49    KEV/CH        0.500
                                       OFFSET        0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM             5   A =     2.000      SLOPE        0.500 E-3
SENSITIVITY     16   B =    10.000      OFFSET       4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

    994     128     103     109     120     129     102     107
   1001     117     104     113     109     105      87     117
   1008     122     114     128     113     118     120     112
   1015      95     111     111     113     124     139     167
   1022     176     161     121     148     124     129     110
   1029     109     103     111      89     116     104     107
   1036      83     100     100      97      93     102     108
   1043      98     100      96      96     116      94      78
PERCENT COPPER                         .0036
   % RSD COUNTING     13.7
   1101      98     124     126     128     128     108     126
   1108     116     125     134     130     130     178     229
   1115     469    1094    2324    3835    4654    3785    2170
   1122    1013     470     562    1365    3493    7827   13210
   1129   15551   12884    7356    2817     774     225      88
   1136      55      57      67      55      41      54      49
   1143      46      65      47      45      39      37      40
   1150      46      36      39      32      47      31      30
PERCENT ANTIMONY                       .6605
   % RSD COUNTING      .4
   1287      23      27      24      29      45      49      51
   1294      44      39      28      18      24      26      24
   1301      25      19      27      24      25      20      17
   1308      29      32      32      63     112     218     358
   1315     490     467     301     170      73      38      25
   1322      22      10      25      22      20      20      30
   1329      32      44      49      56      48      32      24
   1336      26      18      18      23      18      17      12
PERCENT ARSENIC                        .1221
   % RSD COUNTING      2.4
CENTROID CHANNEL COPPER       1022  HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1129            SB-122   4043 MIN.
                 ARSENIC      1315            AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     256.51  BACKGROUND SPACING:
                 ANTIMONY   168.17     COPPER    25
                 ARSENIC     34.89     ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0830:15

91119065 RF              PB                        0300E

SAMPLE TIME              2JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME         4JAN80 0006:56   TYPE       5 MIN
PRESET TIME     300 SEC                   GEOMETRY   SHELF 1      0.250
ELAPSED TIME    317 SEC                   VOLUME     UG        11842.000
LIVE TIME       300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49   KEV/CH        0.500
                                          OFFSET        0.543

                  NORMALIZATION CONSTANTS      GAMMA
FWHM             5    A =    2.000         SLOPE        0.500 E-3
SENSITIVITY     16    B =   10.000         OFFSET       4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    995       126      122      115       98      120      114      123
   1002       114      128      119      128      122      110      128
   1009       123      103      129      113      120      119      108
   1016       133      111      126      136      147      153      142
   1023       179      167      148      149      118      112       87
   1030       111      116      119      113      102      132      119
   1037       108       91      109      116      105      100      101
   1044       119       99      104      104       98       93      100
PERCENT COPPER                           .0043
   % RSD COUNTING     12.6
   1101       113      125      146      129      122      147      136
   1108       131      120      136      155      158      194      286
   1115       531     1213     2599     4222     5126     4264     2442
   1122      1094      495      637     1468     3792     8333    13692
   1129     16013    13168     7438     2814      788      218       94
   1136        76       64       55       48       47       46       55
   1143        62       59       52       44       59       41       50
   1150        43       42       42       37       37       30       39
PERCENT ANTIMONY                         .7390
   % RSD COUNTING      .3
   1287        31       26       25       35       41       45       50
   1294        55       38       34       31       31       33       32
   1301        26       21       34       29       20       20       25
   1308        19       20       33       50      133      247      410
   1315       523      543      340      159       83       29       27
   1322        33       20       21       14       18       24       31
   1329        33       46       53       45       56       37       34
   1336        28       24       19       26       25       24       27
PERCENT ARSENIC                          .1478
   % RSD COUNTING      2.2
CENTROID CHANNEL COPPER       1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1129             SB-122   4043 MIN.
                 ARSENIC      1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17      COPPER    25
                 ARSENIC     34.89      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

91119065 RF   PB   0300F

```
SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         4JAN80 0012:26    TYPE       5 MIN
PRESET TIME      300 SEC ,                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME     318 SEC                    VOLUME     UG        12242.000
LIVE TIME        300 SEC                    DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH        0.500
                                           OFFSET        0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =     2.000       SLOPE         0.500 E-3
SENSITIVITY       16    B =    10.000       OFFSET        4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00
```

```
  994    128      99     126     133     129     121     106
 1001    137     108     141     138     114     126     133
 1008    127     116     118     111     110     123     119
 1015    109     115     111     138     137     138     175
 1022    179     172     160     147     135     123     122
 1029    119      98     119     118     107     114     124
 1036    106     125     116     108     125     123     128
 1043    109     103     105     109     101     119     120
```

PERCENT COPPER   .0037
```
    % RSD COUNTING     14.8
 1101    118     115     134     152     144     143     123
 1108    126     146     142     147     161     161     257
 1115    539    1185    2560    4170    4986    4146    2368
 1122   1100     525     643    1569    4000    8883   14615
 1129  17025   13761    7742    2918     815     204     108
 1136     70      68      69      61      54      58      54
 1143     68      56      47      54      52      51      47
 1150     47      42      57      40      39      33      40
```

PERCENT ANTIMONY   .7562
```
    % RSD COUNTING      .3
 1287     25      38      40      40      48      55      44
 1294     59      38      33      25      31      36      42
 1301     26      28      21      25      20      21      28
 1308     29      39      31      56     121     220     440
 1315    548     496     356     180      71      48      23
 1322     30      18      25      20      19      25      37
 1329     30      44      46      63      54      35      31
 1336     21      13      27      29      20      19      22
```

PERCENT ARSENIC   .1439
```
    % RSD COUNTING      2.2
CENTROID CHANNEL COPPER        1022    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51    BACKGROUND SPACING:
                 ANTIMONY    168.17       COPPER    25
                 ARSENIC      34.89       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

```
FBI LAB WASHINGTON DC          ●                    ●

EXPERIMENT 1    4JAN80 0834:02

91119065 RF            PB                    0300G

SAMPLE TIME            3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME       4JAN80 0017:57   TYPE       5 MIN
PRESET TIME      300 SEC                GEOMETRY   SHELF 1      0.250
ELAPSED TIME     321 SEC                VOLUME     UG      12498.000
LIVE TIME        300 SEC                DETECTOR   GELI 15

CALIBRATION DATE       5OCT79 1357:49   KEV/CH        0.500
                                        OFFSET        0.543

                     NORMALIZATION CONSTANTS     GAMMA
FWHM              5    A =    2.000          SLOPE        0.500 E-3
SENSITIVITY     16    B =   10.000          OFFSET       4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)   80.00

    994     145     166     140     167     155     124     150
   1001     143     146     142     148     132     130     139
   1008     144     139     157     152     141     141     138
   1015     138     129     149     162     175     173     200
   1022     211     225     204     197     168     141     123
   1029     132     155     148     140     123     128     121
   1036     118     159     111     146     145     132     132
   1043     139     124     134     138      98     134     109
PERCENT COPPER                          .0053
    % RSD COUNTING       11.2
   1101     150     150     149     154     149     163     153
   1108     189     149     177     202     187     220     339
   1115     743    1747    3464    5716    6665    5457    3124
   1122    1297     625     787    1802    4764   10051   16238
   1129   18591   14745    8198    3193     891     243     120
   1136      94      84      68      76      79      59      51
   1143      83      86      64      68      54      42      54
   1150      47      49      54      59      56      38      49
PERCENT ANTIMONY                        .8146
    % RSD COUNTING        .3
   1287      35      39      27      34      58      73      57
   1294      79      45      38      32      38      37      37
   1301      33      28      30      28      38      26      30
   1308      27      51      42      81     161     299     605
   1315     727     695     456     236     100      46      33
   1322      38      36      45      27      39      31      27
   1329      42      59      82      62      78      61      30
   1336      41      25      28      27      18      29      25
PERCENT ARSENIC                         .1888
    % RSD COUNTING        1.9
CENTROID CHANNEL COPPER        1022  HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129            SB-122   4043 MIN.
                 ARSENIC       1315            AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51  BACKGROUND SPACING:
                 ANTIMONY    168.17     COPPER    25
                 ARSENIC      34.89     ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                          BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   4JAN80 0835:55

91119065 RF   PB   Q300H

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I
ACQUISITION TIME	4JAN80 0023:31	TYPE	5 MIN
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	319 SEC	VOLUME	UG 14446.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE	5OCT79 1357:49	KEV/CH	0.500
		OFFSET	0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

```
 994    140    132    146    153    135    147    136
1001    136    144    132    151    123    145    131
1008    121    130    155    118    127    133    130
1015    127    139    118    127    154    187    191
1022    176    189    179    157    133    141    115
1029    133    129    124    110    128    116    124
1036    134    119    136    131    121     99    110
1043    132    115    100    107    121    116    111
```

PERCENT COPPER   .0037
    % RSD COUNTING   13.3

```
1101    143    131    128    127    134    129    155
1108    161    160    135    162    154    205    292
1115    571   1403   2848   4695   5643   4420   2601
1122   1151    571    674   1772   4454   9550  15817
1129  18483  15013   8260   3174    829    253    126
1136     74     91     69     63     51     61     55
1143     70     71     53     43     47     57     62
1150     44     44     51     60     47     44     42
```

PERCENT ANTIMONY   .6966
    % RSD COUNTING   .3

```
1287     27     33     36     39     52     43     67
1294     65     53     36     38     35     32     31
1301     32     29     28     23     35     20     39
1308     33     26     37     68    115    254    442
1315    623    587    381    168     75     38     29
1322     24     24     17     25     24     24     26
1329     27     40     59     66     71     54     36
1336     37     28     24     26     29     23     24
```

PERCENT ARSENIC   .1328
    % RSD COUNTING   2.1

CENTROID CHANNEL COPPER	1022	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1129	SB-122	4043 MIN.
ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	256.51	BACKGROUND SPACING:	
ANTIMONY	168.17	COPPER	25
ARSENIC	34.89	ANTIMONY	25
CONSTANTS:		ARSENIC	10
E=2.7183		BACKGROUND CHANNELS 10	
LN2=.69315			

EXPERIMENT 1   4JAN80 0837:49

91119065 RF   PB   0300I

```
SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         4JAN80 0029:04    TYPE       5 MIN
PRESET TIME       300 SEC                  GEOMETRY   SHELF 1       0.250
ELAPSED TIME      319 SEC                  VOLUME     UG        13558.000
LIVE TIME         300 SEC                  DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH         0.500
                                           OFFSET         0.543
```

```
                     NORMALIZATION CONSTANTS    GAMMA
FWHM                5   A =     2.000          SLOPE         0.500 E-3
SENSITIVITY        16   B =    10.000          OFFSET        4.500
LIBRARY NUMBER      1   ENERGY TOLERANCE      1.25
HALF-LIFE RATIO     8   ABUNDANCE LIMIT (%)  80.00
```

```
  995    141     121     111     136     113     157     135
 1002    118     132     151     130     132     128     114
 1009    133     109     110      99     141     134     135
 1016    110     131     119     138     192     174     199
 1023    192     166     150     167     137     134     106
 1030    115     111     125     124     129     102     109
 1037    127     132     139     102     117     122     100
 1044    106     129      91     133     112     137     119
```
PERCENT COPPER   .0043
```
   % RSD COUNTING      12.0
 1101    143     131     148     144     138     144     149
 1108    139     159     140     171     161     185     306
 1115    613    1351    2928    4791    5582    4595    2639
 1122   1160     536     681    1728    4295    9683   15283
 1129  17710   14531    8040    3092     888     231     108
 1136     85      91      64      53      54      67      68
 1143     61      74      52      64      52      62      44
 1150     39      40      49      44      40      42      44
```
PERCENT ANTIMONY   .7216
```
   % RSD COUNTING       .3
 1287     28      30      35      39      42      51      48
 1294     56      38      38      30      32      34      34
 1301     27      27      27      30      13      28      28
 1308     26      29      45      66     134.    301     472
 1315    637     576     396     191      73      40      27
 1322     23      23      18      32      23      27      27
 1329     35      46      47      72      56      58      31
 1336     26      26      22      26      26      26      26
```
PERCENT ARSENIC   .1503
```
   % RSD COUNTING       2.1
```

```
CENTROID CHANNEL COPPER        1023    HALF-LIFE  CU-64     768 MIN.
                 ANTIMONY      1129               SB-122   4043 MIN.
                 ARSENIC       1315               AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51    BACKGROUND SPACING:
                 ANTIMONY    168.17       COPPER    25
                 ARSENIC      34.89       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   4JAN80 0839:42

91119065 RF   PB   0300J

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I	
ACQUISITION TIME	4JAN80 0034:36	TYPE	5 MIN	
PRESET TIME	300 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	309 SEC	VOLUME	UG	9751.000
LIVE TIME	300 SEC	DETECTOR	GELI 15	

CALIBRATION DATE	5OCT79 1357:49	KEV/CH	0.500
		OFFSET	0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	74	71	72	62	91	65	59
1002	67	65	59	73	67	61	61
1009	65	75	63	59	68	55	84
1016	78	52	73	73	80	111	96
1023	79	94	91	77	63	72	70
1030	57	59	62	60	58	71	62
1037	62	64	65	67	85	58	59
1044	57	66	54	61	64	76	77

PERCENT COPPER   .0023
% RSD COUNTING   23.3

1101	65	75	62	67	79	81	62
1108	62	86	68	79	77	83	128
1115	241	505	1173	2074	2608	2313	1355
1122	628	297	306	730	2015	4627	7867
1129	9934	8230	4819	1908	528	113	50
1136	27	22	15	17	20	19	23
1143	16	23	30	21	26	21	23
1150	19	24	32	20	23	25	20

PERCENT ANTIMONY   .5448
% RSD COUNTING   .5

1287	10	20	18	20	19	28	37
1294	29	24	21	10	20	13	12
1301	13	19	16	14	12	17	18
1308	21	15	18	26	54	104	208
1315	269	260	204	100	43	20	16
1322	11	9	10	10	13	16	14
1329	21	28	27	38	34	13	13
1336	16	7	23	14	19	19	13

PERCENT ARSENIC   .0913
% RSD COUNTING   3.2

CENTROID CHANNEL	COPPER	1023	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1315		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:		
	ANTIMONY	168.17	COPPER	25	
	ARSENIC	34.89	ANTIMONY	25	

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0841:35

91119065 RF              PB                        Q300K

SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         4JAN80 0039:59    TYPE       5 MIN
PRESET TIME      300 SEC                   GEOMETRY   SHELF 1      0.250
ELAPSED TIME     317 SEC                   VOLUME     UG        12268.000
LIVE TIME        300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH         0.500
                                           OFFSET         0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2.000          SLOPE          0.500 E-3
SENSITIVITY      16   B =   10.000          OFFSET         4.500
LIBRARY NUMBER    1   ENERGY TOLERANCE      .1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)  80.00

   994     103     129     112     119     125     111     127
  1001     113     111     128      92      99      99     109
  1008     116     126     121     118     108      96     128
  1015     110     108     111     132     128     152     140
  1022     157     166     162     158     115     106      98
  1029     116     117     111     105      98      94     117
  1036     102     112     116     106     108      95     114
  1043     107     104     141     104      99      95      97
PERCENT COPPER                          .0034
   % RSD COUNTING       15.9
  1101     114     123     121     140     128     115     112
  1108     122     117     131     151     154     179     239
  1115     481    1142    2367    3913    4742    3891    2289
  1122    1025     491     595    1389    3704    8252   13591
  1129   16044   12859    7266    2930     750     196     102
  1136      66      43      64      43      47      49      49
  1143      46      70      44      39      51      36      30
  1150      29      59      31      39      32      40      48
PERCENT ANTIMONY                        .7110
   % RSD COUNTING        .3
  1287      27      32      30      34      38      49      67
  1294      40      46      28      23      33      21      29
  1301      24      28      26      29      31      26      24
  1308      19      31      43      59     118     213     394
  1315     530     476     321     183      69      28      26
  1322      24      20      27      10      22      24      19
  1329      38      36      52      45      41      40      24
  1336      12      18      25      21      29      30      20
PERCENT ARSENIC                         .1362
   % RSD COUNTING        2.3
CENTROID CHANNEL COPPER        1022    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51    BACKGROUND SPACING:
                 ANTIMONY    168.17       COPPER    25
                 ARSENIC      34.89       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   4JAN80 0843:29

91119065 RF   PB   Q300L

SAMPLE TIME	3JAN80 1135:00	LOCATION AFRRI I
ACQUISITION TIME	4JAN80 0045:29	TYPE 5 MIN
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 316 SEC		VOLUME UG 10572.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

994	103	102	95	143	111	105	115
1001	86	115	102	94	96	114	96
1008	133	103	98	137	90	98	100
1015	94	103	126	111	109	146	161
1022	157	184	140	127	97	117	100
1029	108	96	96	92	107	119	101
1036	100	96	108	84	113	99	99
1043	122	92	82	97	98	116	100

PERCENT COPPER   .0043
% RSD COUNTING   14.4

1101	123	115	109	115	120	127	114
1108	135	121	121	133	152	194	251
1115	485	1111	2457	4023	4887	4096	2288
1122	1094	473	594	1251	3458	7461	12689
1129	15393	12536	7140	2715	682	205	90
1136	65	53	57	54	44	37	46
1143	54	48	58	43	43	39	53
1150	29	39	52	41	41	33	25

PERCENT ANTIMONY   .7843
% RSD COUNTING   .4

1287	22	30	23	34	44	44	64
1294	51	28	31	28	23	29	25
1301	23	25	28	24	20	30	28
1308	27	18	28	60	112	232	415
1315	530	526	342	189	61	30	21
1322	26	27	11	24	22	17	31
1329	38	33	63	52	44	39	33
1336	23	22	28	27	14	27	23

PERCENT ARSENIC   .1674
% RSD COUNTING   2.2

CENTROID CHANNEL COPPER	1022	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1129	SB-122	4043 MIN.
ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	256.51	BACKGROUND SPACING:	
ANTIMONY	168.17	COPPER	25
ARSENIC	34.89	ANTIMONY	25
CONSTANTS:		ARSENIC	10
E=2.7183		BACKGROUND CHANNELS	10
LN2=.69315			

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0845:22

91119065 RF            PB                      0300M

SAMPLE TIME              3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME         4JAN80 0050:58   TYPE       5 MIN
PRESET TIME     300 SEC                   GEOMETRY   SHELF 1      0.250
ELAPSED TIME    317 SEC                   VOLUME     UG        11568.000
LIVE TIME       300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49   KEV/CH        0.500
                                          OFFSET        0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM             5    A =    2.000          SLOPE        0.500 E-3
SENSITIVITY     16   B =   10.000          OFFSET       4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

    995      112      131      123      102      129      105      120
   1002      135      122      123      118      123      115      129
   1009      105      120      111      114      134      110      103
   1016      108      113      145      121      170      150      178
   1023      180      151      138      156      117      101      123
   1030      105      121      107       94       88      109      100
   1037      102      113       98      103      101      117       89
   1044      113      133      121      117      116      102      123
PERCENT COPPER                         .0042
   % RSD COUNTING      14.4
   1101      124      134      111      134      124      127      133
   1108      138      142      134      157      182      190      290
   1115      538     1172     2615     4211     5120     4268     2447
   1122     1075      517      618     1372     3877     8390    13926
   1129    16635    13343     7563     2779      798      228      100
   1136       77       59       60       55       52       33       63
   1143       57       54       59       54       41       32       40
   1150       42       37       45       50       51       39       38
PERCENT ANTIMONY                       .7772
   % RSD COUNTING       .3
   1287       21       21       28       32       40       56       44
   1294       52       39       30       31       26       23       22
   1301       32       24       18       26       22       22       28
   1308       30       33       28       63      125      232      440
   1315      577      575      348      '190      60       47       18
   1322       29       17       20       27       20       27       24
   1329       43       38       46       59       62       37       38
   1336       14       24       24       27       25       17       14
PERCENT ARSENIC                        .1635
   % RSD COUNTING      2.2
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129             SB-122   4043 MIN.
                 ARSENIC       1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51   BACKGROUND SPACING:
                 ANTIMONY    168.17       COPPER    25
                 ARSENIC      34.89       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
    E=2.7183                         BACKGROUND CHANNELS 10
    LN2=.69315
```

EXPERIMENT 1   4JAN80 0847:15

91119065 RF   PB   Q300N

SAMPLE TIME	3JAN80 1135:00	LOCATION AFRRI I
ACQUISITION TIME	4JAN80 0056:28	TYPE 5 MIN
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 317 SEC		VOLUME UG 12941.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

```
                    NORMALIZATION CONSTANTS   GAMMA
FWHM              5   A =    2.000          SLOPE         0.500 E-3
SENSITIVITY     16   B =   10.000          OFFSET        4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00
```

995	123	115	121	110	129	135	113
1002	130	122	116	115	116	139	125
1009	135	109	89	129	99	93	125
1016	109	116	113	120	134	153	171
1023	155	169	136	139	107	121	112
1030	97	103	83	90	102	111	99
1037	112	109	133	124	102	116	106
1044	86	115	97	89	107	120	117

PERCENT COPPER   .0032
```
   % RSD COUNTING       16.6
```

1101	148	113	112	112	145	121	133
1108	132	122	166	126	155	175	231
1115	473	1171	2324	4044	4867	4041	2369
1122	992	502	595	1465	3699	8490	13593
1129	16293	13356	7463	2831	782	159	91
1136	78	63	55	57	56	51	50
1143	58	61	42	40	32	27	49
1150	44	48	46	48	39	36	31

PERCENT ANTIMONY   .6875
```
   % RSD COUNTING        .3
```

1287	27	25	30	31	49	53	51
1294	48	43	24	26	22	27	22
1301	21	30	27	37	20	20	26
1308	25	20	34	43	115	244	394
1315	553	507	354	191	64	24	26
1322	19	21	21	18	19	22	17
1329	37	34	52	51	50	37	32
1336	30	24	19	14	28	14	21

PERCENT ARSENIC   .1382
```
   % RSD COUNTING        2.2
```

```
CENTROID CHANNEL COPPER      1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY    1129             SB-122  4043 MIN.
                 ARSENIC     1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER    256.51   BACKGROUND SPACING:
                 ANTIMONY  168.17      COPPER    25
                 ARSENIC    34.89      ANTIMONY  25
CONSTANTS:                             ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0849:09

91119065 RF           PB                    03000

SAMPLE TIME            3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME       4JAN80 0101:58   TYPE       5 MIN
PRESET TIME      300 SEC                GEOMETRY   SHELF 1        0.250
ELAPSED TIME     317 SEC                VOLUME     UG        12980.000
LIVE TIME        300 SEC                DETECTOR   GELI 15

CALIBRATION DATE       5OCT79 1357:49   KEV/CH         0.500
                                        OFFSET         0.543

                      NORMALIZATION CONSTANTS    GAMMA
FWHM               5    A =    2.000        SLOPE         0.500 E-3
SENSITIVITY       16    B =   10.000        OFFSET        4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)   80.00

     993      124      124      120      123      131      102      121
    1000      114      117      125      113      124      120      112
    1007      125      102      113      127      120      105      116
    1014       92      132      110      122      132      142      126
    1021      149      166      167      155      122      110      136
    1028      105      115       99      107      103      138      120
    1035      110      107      113      120      104       95       89
    1042      124      124      107      120      101      117      113
PERCENT COPPER                          .0028
   % RSD COUNTING     18.9
    1101      128      118      125      106      139      126      136
    1108      145      139      136      140      118      180      259
    1115      513     1170     2553     4146     4948     4225     2426
    1122     1082      485      603     1424     3706     8305    13689
    1129    16136    13299     7496     2926      775      201       76
    1136       80       71       79       57       55       56       53
    1143       59       66       55       51       50       49       33
    1150       43       28       47       39       42       37       25
PERCENT ANTIMONY                        .6842
   % RSD COUNTING      .3
    1287       26       30       28       35       41       46       63
    1294       49       36       35       26       23       21       20
    1301       28       26       22       21       28       22       18
    1308       28       28       33       52      130      264      448
    1315      578      521      347      194       79       28       20
    1322       27       22       31       35       20       23       29
    1329       39       36       52       48       58       39       31
    1336       26       25       12       27       30       25       15
PERCENT ARSENIC                         .1454
   % RSD COUNTING      2.2
CENTROID CHANNEL COPPER        1021   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129             SB-122   4043 MIN.
                 ARSENIC       1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51   BACKGROUND SPACING:
                 ANTIMONY    168.17      COPPER    25
                 ARSENIC      34.89      ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0851:02

91119065 RF              PB                      Q300P

SAMPLE TIME              3JAN80 1135:00   LOCATION    AFRRI I
ACQUISITION TIME         4JAN80 0107:28   TYPE        5 MIN
PRESET TIME        300 SEC                GEOMETRY    SHELF 1       0.250
ELAPSED TIME       317 SEC                VOLUME      UG         13991.000
LIVE TIME          300 SEC                DETECTOR    GELI 15

CALIBRATION DATE         5OCT79 1357:49   KEV/CH          0.500
                                          OFFSET          0.543

                    NORMALIZATION CONSTANTS      GAMMA
FWHM              5    A =    2.000          SLOPE          0.500 E-3
SENSITIVITY      16    B =   10.000          OFFSET         4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00

    994     138     137     111     135     100     128     121
   1001     103      96     124     103     100     116     136
   1008     117     107     108     112     128     107     134
   1015     120     113     127     117     132     156     152
   1022     170     173     174     148     124     117     124
   1029     103     129     108     107     120     100     116
   1036     114     110      93     127     112     139     120
   1043     108      97     112     108     115     109     111
PERCENT  COPPER                          .0033
    % RSD COUNTING        15.1
   1101     119     135     120     124     142     129     130
   1108     169     133     134     151     171     158     266
   1115     485    1200    2526    4120    4889    4126    .2454
   1122    1113     483     607    1481    3883    8635   14310
   1129   16939   13790    7830    2936     785     202     108
   1136      82      74      64      72      59      52      71
   1143      70      56      52      48      50      42      43
   1150      47      44      42      43      58      44      51
PERCENT  ANTIMONY                        .6619
    % RSD COUNTING         .3
   1287      24      30      32      28      37      50      54
   1294      39      45      31      24      32      24      21
   1301      40      30      28      36      26      16      36
   1308      33      37      36      55     137     232     406
   1315     568     510     357     155      62      42      16
   1322      19      19      27      26      22      25      35
   1329      30      41      47      56      43      38      29
   1336      20      32      30      24      31      24      14
PERCENT  ARSENIC                         .1276
    % RSD COUNTING         2.3
CENTROID CHANNEL  COPPER       1022   HALF-LIFE CU-64     768 MIN.
                  ANTIMONY     1129             SB-122   4043 MIN.
                  ARSENIC      1315             AS-76    1584 MIN.
COUNTS/MICROGRAM  COPPER      256.51  BACKGROUND SPACING:
                  ANTIMONY    168.17      COPPER     25
                  ARSENIC      34.89      ANTIMONY   25
CONSTANTS:                               ARSENIC    10
    E=2.7183                         BACKGROUND CHANNELS 10
    LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0852:55

91119065 RF            PB                      Q3000

SAMPLE TIME              3JAN80 1135:00   LOCATION    AFRRI I
ACQUISITION TIME         4JAN80 0112:59   TYPE        5 MIN
PRESET TIME      300 SEC                  GEOMETRY    SHELF 1        0.250
ELAPSED TIME     319 SEC                  VOLUME      UG         12153.000
LIVE TIME        300 SEC                  DETECTOR    GELI 15

CALIBRATION DATE        5OCT79 1357:49    KEV/CH         0.500
                                          OFFSET         0.543

                     NORMALIZATION CONSTANTS      GAMMA
FWHM             . .    5   A =    2.000          SLOPE       0.500 E-3
SENSITIVITY           16   B =   10.000          OFFSET      4.500
LIBRARY NUMBER         1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO        8   ABUNDANCE LIMIT (%)  80.00

    994      143      119      115      136      121      131      128
   1001      145      120      127      118      112      136      115
   1008      113      145      137      143      122      119      125
   1015      143      107      135      134      137      143      173
   1022      177      182      168      159      104      123      141
   1029      120      111      132      118      126      123      103
   1036      121      106      123      127      115      111      116
   1043      112      114      127      131      127      132      139
PERCENT COPPER                         .0032
   % RSD COUNTING      18.4
   1101      145      170      122      133      137      136      145
   1108      153      144      158      171      194      206      290
   1115      608     1405     2992     4874     5749     4850     2768
   1122     1249      567      658     1543     4028     9106    14832
   1129    17345    13998     7911     2954      787      194      101
   1136       78       75       59       59       62       56       65
   1143       71       68       65       52       50       56       53
   1150       42       46       47       53       32       50       38
PERCENT ANTIMONY                       .7833
   % RSD COUNTING       .3
   1287       28       21       34       43       43       53       51
   1294       67       53       31       41       33       33       39
   1301       25       25       25       26       26       26       33
   1308       27       19       50       78      119      281      490
   1315      609      611      392      197       77       44       22
   1322       26       27       27       15       29       32       26
   1329       33       35       52       64       55       38       31
   1336       26       26       25       30       27       25       20
PERCENT ARSENIC                        .1696
   % RSD COUNTING       2.1
CENTROID CHANNEL COPPER         1022    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY       1129              SB-122   4043 MIN.
                 ARSENIC        1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER       256.51    BACKGROUND SPACING:
                 ANTIMONY     168.17       COPPER    25
                 ARSENIC       34.89       ANTIMONY  25
CONSTANTS:                                 ARSENIC   10
   E=2.7183                     BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   4JAN80 0854:49

91119065 RF   PB   0300R

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I
ACQUISITION TIME	4JAN80 0118:31	TYPE	5 MIN
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	315 SEC	VOLUME	UG 12175.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

995	96	88	108	109	103	107	113
1002	99	102	102	82	130	112	111
1009	90	98	128	102	104	104	106
1016	96	109	91	113	124	129	139
1023	164	157	127	129	121	103	90
1030	98	101	105	87	94	93	89
1037	79	95	81	110	94	89	79
1044	107	103	100	85	91	81	93

PERCENT COPPER   .0039
   % RSD COUNTING   13.8

1101	104	117	112	103	107	104	115
1108	116	126	122	136	130	160	201
1115	406	1013	2026	3554	4406	3695	2189
1122	998	455	529	1283	3326	7459	12608
1129	14861	12297	7179	2774	732	200	86
1136	69	57	46	47	51	51	57
1143	35	43	53	48	41	23	43
1150	37	36	27	47	27	38	34

PERCENT ANTIMONY   .6754
   % RSD COUNTING   .4

1287	16	24	20	28	28	55	51
1294	47	45	33	18	16	25	15
1301	29	20	24	24	20	23	18
1308	22	23	26	50	95	185	371
1315	453	451	317	148	66	38	22
1322	16	14	11	25	22	13	26
1329	30	38	35	58	44	34	19
1336	18	12	17	24	14	18	20

PERCENT ARSENIC   .1272
   % RSD COUNTING   2.4

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:	
	ANTIMONY	168.17	COPPER	25
	ARSENIC	34.89	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0856:42

91119065 RF   PB   Q3005

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0124:00   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   315 SEC   .   VOLUME   UG   11803.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%)   80.00

     993   112   111   101   112   94   104   96
    1000   105   108   106   131   111   114   109
    1007   105   116   114   98   95   107   110
    1014   89   99   111   97   143   115   149
    1021   120   157   155   145   130   125   94
    1028   120   103   104   104   109   113   101
    1035   105   112   116   95   88   93   95
    1042   106   83   116   88   105   112   103
PERCENT COPPER   .0035
    % RSD COUNTING   16.4
    1101   130   111   122   105   125   125   125
    1108   115   146   109   115   139   159   224
    1115   420   1057   2268   3953   4667   3860   2286
    1122   1052   494   570   1274   3452   7729   12735
    1129   15495   12719   7037   2744   768   185   77
    1136   67   68   48   32   65   49   52
    1143   49   48   56   47   28   33   28
    1150   49   42   48   37   28   35   42
PERCENT ANTIMONY   .7133
    % RSD COUNTING   .4
    1287   25   19   27   33   39   48   56
    1294   41   34   43   33   32   21   21
    1301   21   24   17   21   24   20   22
    1308   23   26   31   44   103   219   360
    1315   514   467   333   160   82   32   25
    1322   23   16   19   23   20   14   16
    1329   22   36   50   59   41   32   29
    1336   19   28   23   19   12   18   18
PERCENT ARSENIC   .1410
    % RSD COUNTING   2.3
CENTROID CHANNEL COPPER   1021   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY .   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0858:35

91119065 RF           PB                    Q300T

SAMPLE TIME          3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME     4JAN80 0129:29   TYPE       5 MIN
PRESET TIME     300 SEC               GEOMETRY   SHELF.1     0.250
ELAPSED TIME    321 SEC               VOLUME     UG      14122.000
LIVE TIME       300 SEC               DETECTOR   GELI 15

CALIBRATION DATE     5OCT79 1357:49   KEV/CH         0.500
                                      OFFSET         0.543

                NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000         SLOPE       0.500 E-3
SENSITIVITY     16    B =   10.000         OFFSET      4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE    1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

    994    155    157    142    141    139    133    149
   1001    157    119    147    152    143    152    139
   1008    141    134    121    147    143    142    139
   1015    166    147    137    135    179    194    196
   1022    186    197    200    196    147    156    133
   1029    138    135    112    146    130    121    131
   1036    144    134    125    141    135    122    134
   1043    138    138    117    144    143    134    153
PERCENT COPPER                        .0042
   % RSD COUNTING      13.1
   1101    141    170    159    159    147    150    149
   1108    167    175    151    203    193    240    340
   1115    677   1620   3476   5532   6291   5212   2961
   1122   1323    677    828   1948   4935  10634  17185
   1129  19778  15834   8528   3245    924    276    129
   1136    109     89     90     89     72     58     82
   1143     77     88     65     65     46     58     58
   1150     53     69     71     60     51     45     51
PERCENT ANTIMONY                      .7720
   % RSD COUNTING       .3
   1287     43     41     36     46     68     55     69
   1294     62     42     45     50     30     31     36
   1301     22     32     22     33     18     33     25
   1308     37     42     43     68    156    315    574
   1315    731    679    424    223     83     40     32
   1322     26     33     30     24     30     36     28
   1329     37     54     56     62     74     40     50
   1336     32     32     25     27     28     36     15
PERCENT ARSENIC                       .1698
   % RSD COUNTING       1.9
CENTROID CHANNEL COPPER        1022   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129             SB-122  4043 MIN.
                 ARSENIC       1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      256.51   BACKGROUND SPACING:
                 ANTIMONY    168.17      COPPER   25
                 ARSENIC      34.89      ANTIMONY 25
CONSTANTS:                              ARSENIC  10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0900:28

91119065 RF              PB                      Q301A

SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         4JAN80 0135:03    TYPE       5 MIN
PRESET TIME      300 SEC                   GEOMETRY   SHELF 1       0.250
ELAPSED TIME     311 SEC                   VOLUME     UG         7810.000
LIVE TIME        300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH         0.500
                                           OFFSET         0.543

                    NORMALIZATION CONSTANTS     GAMMA
FWHM            5    A =     2.000          SLOPE         0.500 E-3
SENSITIVITY   16    B =    10.000          OFFSET        4.500
LIBRARY NUMBER 1    ENERGY TOLERANCE    1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%)  80.00

    994      64      78      86      71      83      66      75
   1001      86      76      73      78      70      84      80
   1008      71      81      89      79      77      72      72
   1015      74      66      90      70      77     111      85
   1022     105     113     115      86      66      69      81
   1029      67      72      74      73      83      74      68
   1036      69      78      64      62      83      70      67
   1043      65      63      63      84      72      78      82
PERCENT COPPER                        .0033
   % RSD COUNTING      22.1
   1101      75      80      85      86      70      85      92
   1108     102     106     101      92      90     100     142
   1115     263     703    1403    2551    3263    2769    1619
   1122     686     331     374     818    2232    5184    8967
   1129   11213    9425    5391    2100     554     125      41
   1136      37      26      29      24      26      26      38
   1143      28      41      40      24      28      30      28
   1150      24      19      25      22      24      17      28
PERCENT ANTIMONY                      .7769
   % RSD COUNTING       .4
   1287      18      12      26      21      36      40      35
   1294      39      32      24      11      19      15      15
   1301      17      17      13      11      17      13      22
   1308      25      24      22      32      63     151     233
   1315     340     334     258      93      54      23      23
   1322      13      14      12      11      17      15      10
   1329      25      23      24      29      39      35      21
   1336      14      18      15      13      12      19      17
PERCENT ARSENIC                       .1453
   % RSD COUNTING      2.8
CENTROID CHANNEL COPPER       1022    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY     1129              SB-122   4043 MIN.
                 ARSENIC      1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER     256.51    BACKGROUND SPACING:
                 ANTIMONY   168.17       COPPER    25
                 ARSENIC     34.89       ANTIMONY 25
CONSTANTS:                               ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0902:22

91119065 RF              PB                      0301B

SANPLE TIME              3JAN80 1135:00    LOCATION    AFRRI I
ACQUISITION TIME         4JAN80 0140:27    TYPE        5 MIN
PRESET TIME      300 SEC                   GEOMETRY    SHELF 1      0.250
ELAPSED TIME     313 SEC                   VOLUME      UG        9211.000
LIVE TIME        300 SEC                   DETECTOR    GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH         0.500
                                           OFFSET         0.543

                    NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000             SLOPE       0.500 E-3
SENSITIVITY     16    B =   10.000             OFFSET      4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

   995       92      103       93       78      104       93       99
  1002       85       85       93       98       92      101       83
  1009       95       93       99       75      105       88       95
  1016      105       98       89       97      121      131      109
  1023      121      132      110       98       91      104      101
  1030       89       90       83       82       86       65       97
  1037       86       68       85       75       77       63       91
  1044       72       91       86       76       72       84       71
PERCENT COPPER                             .0640
   % RSD COUNTING       17.0
  1101       87      114       95      112      103      120       92
  1108      107      112      133      129      115      153      221
  1115      359      840     1912     3154     3911     3278     1979
  1122      849      418      439     1022     2766     6163    10978
  1129    13188    11023     6267     2390      666      126       63
  1136       49       46       41       32       38       37       40
  1143       38       43       37       34       38       33       24
  1150       33       36       35       43       26       26       23
PERCENT ANTIMONY                           .7809
   % RSD COUNTING        .4
  1287       19       13       22       27       33       48       38
  1294       51       28       22       16       22       18       17
  1301       20       19       20       19       33       22       19
  1308       19       24       30       29       86      175      325
  1315      418      419      255      145       46       22       16
  1322        6       18       13       13       21       17       22
  1329       26       34       41       44       36       16       19
  1336       14       21       24       17       15       19        9
PERCENT ARSENIC                            .1520
   % RSD COUNTING        2.6
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129             SB-122  4043 MIN.
                 ARSENIC       1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      256.51   BACKGROUND SPACING:
                 ANTIMONY    168.17       COPPER    25
                 ARSENIC      34.89       ANTIMONY  25
CONSTANTS.                                ARSENIC   10
    E=2.7183                         BACKGROUND CHANNELS 10
    LN2=.69315
```

EXPERIMENT 1   4JAN80 0904.15

S4119063 RF   FB   0301C

SAMPLE TIME		3JAN80 1135:00	LOCATION	AFRRI I
ACQUISITION TIME		4JAN80 0145:53	TYPE	5 MIN
PRESET TIME	360 SEC		GEOMETRY	SHELF 1 0.250
ELAPSED TIME	315 SEC		VOLUME	UG 12480.000
LIVE TIME	300 SEC		DETECTOR	GELI 15

CALIBRATION DATE   30CT79 1257:49   KEV/CH   0.500
                                           OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	3	ABUNDANCE LIMIT (%)	80.00		

390	104	80	86	86	78	87	79
1038	134	77	84	96	90	67	86
1045	82	85	91	92	66	93	85
1015	98	88	96	105	94	101	113
1037	109	114	115	120	84	84	93
1028	84	56	73	73	76	85	81
1037	84	81	78	68	75	86	88
1044	67	76	77	75	77	66	65

PERCENT COPPER   .0029
% RSD COUNTING   16.2

1101	51	84	81	105	85	93	93
1108	55	110	98	102	102	115	190
1115	320	699	1560	2724	3299	2911	1647
1131	729	378	438	955	2573	5864	10497
1129	12558	10708	6046	2364	669	168	64
1136	51	51	30	35	31	31	50
1143	25	30	31	35	30	30	36
1150	22	29	33	31	31	26	22

PERCENT ANTIMONY   .5544
% RSD COUNTING   .4

1287	22	19	24	19	33	36	36
1294	42	25	22	14	18	19	22
1301	19	15	18	18	21	16	16
1308	11	13	18	42	80	132	246
1315	246	372	259	128	49	15	19
1322	15	14	13	26	19	18	15
1325	18	17	28	39	32	24	12
1336	15	14	21	14	21	16	13

PERCENT ARSENIC   .0060
% RSD COUNTING   2.8

CENTROID CHANNEL	COPPER	1023	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1315		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:		
	ANTIMONY	168.17	COPPER	25	
	ARSENIC	34.89	ANTIMONY	25	

CONSTANTS: ARSENIC   10
  E=2.7183   BACKGROUND CHANNELS 10
  LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0906:08

91119065 RF            PB                      0301D

SAMPLE TIME             3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME        4JAN80 0151:19   TYPE       5 MIN
PRESET TIME      300 SEC                 GEOMETRY   SHELF 1        0.250
ELAPSED TIME     311 SEC                 VOLUME     UG        10863.000
LIVE TIME        300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH          0.500
                                         OFFSET          0.543

                        NORMALIZATION CONSTANTS    GAMMA
FMHM               5    A =    2.000              SLOPE      0.500 E-3
SENSITIVITY       16    B =   10.000              OFFSET     4.500
LIBRARY NUMBER     1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO    8    ABUNDANCE LIMIT (%)  80.00

    994       76       83       81       72       70       66       66
   1001       62       78       74       76       76       53       80
   1008       75       73       65       87       65       75       83
   1015       67       71       78       92       84       99       95
   1022      109       80       99      101       72       79       80
   1029       87       89       78       89       62       70       62
   1036       69       65       70       53       75       76       75
   1043       80       68       61       63       73       64       83
PERCENT  COPPER                           .0025
    % RSD COUNTING      20.6
   1101       81       88       77       75       81       86       84
   1108       84       82       88       92       93      102      154
   1115      254      614     1393     2343     2979     2529     1496
   1122      686      319      339      843     2295     5230     9000
   1129    11379     9488     5702     2176      578      136       54
   1136       37       35       29       32       22       26       37
   1143       29       35       29       29       25       22       22
   1150       22       30       22       29       26       20       26
PERCENT  ANTIMONY                         .5696
    % RSD COUNTING       .4
   1287       12       10       15       22       15       27       31
   1294       35       28       26        9       14       13       20
   1301       10       13       13       15       19       14       20
   1308       18       16       23       33       59      138      243
   1315      306      310      224      114       56       13       19
   1322       13       11       12       12       15       13       14
   1329       20       16       37       25       32       25       20
   1336       16       13       14       13       16       14       15
PERCENT  ARSENIC                          .0993
    % RSD COUNTING       2.9
CENTROID CHANNEL COPPER        1022    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51    BACKGROUND SPACING:
                 ANTIMONY    168.17       COPPER    25
                 ARSENIC      34.89       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
    E=2.7183                           BACKGROUND CHANNELS 10
    LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0908:02

91119065 RF   PB   0301E

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0156:43   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   318 SEC   VOLUME   UG   12396.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

    996   124   132   132   113   110   102   121
   1003   121   137   148   134   120   108   134
   1010   117   122   117   105   137   128   120
   1017   121   122   116   125   175   175   180
   1024   171   143   131   142   109   104   139
   1031   115   117   105   137   114   125   119
   1038   126   113   113   134   121   101   110
   1045   104   109   135   108   126   126   105
PERCENT COPPER   .0039
   % RSD COUNTING   15.5
   1101   160   113   142   125   124   146   153
   1108   150   139   150   156   167   225   269
   1115   549   1168   2737   4330   5351   4331   2492
   1122   1114   542   617   1471   3860   8668   14191
   1129   16405   13787   7644   2962   849   219   106
   1136   78   90   65   63   38   59   56
   1143   66   60   53   53   47   51   41
   1150   40   51   44   47   48   40   32
PERCENT ANTIMONY   .7446
   % RSD COUNTING   .3
   1287   31   29   28   35   45   42   52
   1294   52   35   36   28   30   29   28
   1301   28   30   18   22   16   37   32
   1308   29   28   35   56   124   245   429
   1315   550   541   359   193   88   33   27
   1322   22   22   24   21   16   26   33
   1329   29   32   56   58   43   49   30
   1336   20   19   33   27   28   16   13
PERCENT ARSENIC   .1536
   % RSD COUNTING   2.2
CENTROID CHANNEL COPPER   1024   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   4JAN80 0909:55

91119065 RF   PB   0301F

SAMPLE TIME	3JAN80 1135:00	LOCATION AFRRI I
ACQUISITION TIME	4JAN80 0202:14	TYPE 5 MIN
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 316 SEC		VOLUME UG 9893.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                           OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

995	122	108	99	110	108	124	89
1002	130	91	130	109	106	109	101
1009	110	98	107	65	127	111	96
1016	108	132	112	116	139	147	164
1023	137	147	143	123	118	104	97
1030	116	100	98	108	99	103	99
1037	98	97	109	92	100	117	99
1044	99	93	110	99	114	91	112

PERCENT COPPER   .0042
   % RSD COUNTING   16.9

1101	112	107	137	100	117	113	109
1108	113	101	129	124	166	161	243
1115	450	1042	2410	4004	4872	4007	2392
1122	1004	525	537	1301	3409	7573	12567
1129	14801	12245	7090	2684	705	182	82
1136	78	64	59	52	54	39	49
1143	56	43	58	34	33	37	31
1150	39	55	40	33	35	32	34

PERCENT ANTIMONY   .8353
   % RSD COUNTING   .4

1287	24	28	27	34	38	28	63
1294	47	39	26	28	22	25	23
1301	24	26	23	22	25	27	15
1308	27	27	38	34	115	195	366
1315	506	543	304	211	60	42	23
1322	22	29	31	25	24	18	36
1329	27	35	49	54	52	36	27
1336	30	17	20	19	17	19	19

PERCENT ARSENIC   .1756
   % RSD COUNTING   2.3

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:	
	ANTIMONY	168.17	COPPER 25	
	ARSENIC	34.89	ANTIMONY 25	

CONSTANTS: ARSENIC 10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   4JAN80 0911:49

91119065 RF   PB   Q301G

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I
ACQUISITION TIME	4JAN80 0207:43	TYPE	5 MIN
PRESET TIME 300 SEC		GEOMETRY	SHELF 1 0.250
ELAPSED TIME 318 SEC		VOLUME	UG 11926.000
LIVE TIME 300 SEC		DETECTOR	GELI 15

CALIBRATION DATE	5OCT79 1357:49	KEV/CH	0.500
		OFFSET	0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE 0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET 4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00	

994	131	124	142	127	135	123	140
1001	121	125	126	143	109	130	112
1008	135	137	131	131	108	98	114
1015	135	126	118	122	154	143	185
1022	172	172	166	158	144	140	124
1029	124	145	102	89	96	126	131
1036	99	116	110	107	117	114	107
1043	116	126	119	111	107	133	122

PERCENT COPPER   .0040
    % RSD COUNTING   16.0

1101	145	133	162	126	131	158	154
1108	140	136	137	133	167	218	285
1115	557	1290	2713	4544	5481	4403	2635
1122	1180	538	696	1577	4029	8866	14570
1129	17114	14102	8072	2997	851	241	109
1136	70	62	68	68	70	54	52
1143	79	53	57	50	31	52	43
1150	50	48	41	49	36	41	31

PERCENT ANTIMONY   .8009
    % RSD COUNTING   .3

1287	24	29	31	38	50	60	55
1294	48	36	38	27	30	31	32
1301	26	27	34	24	21	30	23
1308	27	25	45	59	128	275	449
1315	561	577	407	188	85	44	23
1322	20	25	21	17	26	23	28
1329	26	36	62	53	46	38	36
1336	35	31	21	29	22	20	24

PERCENT ARSENIC   .1701
    % RSD COUNTING   2.1

CENTROID CHANNEL	COPPER	1022	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:	
	ANTIMONY	168.17	COPPER 25	
	ARSENIC	34.89	ANTIMONY 25	

CONSTANTS.   ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0913:42

91119065 RF              PB                      Q301H

SAMPLE TIME           3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME      4JAN80 0213:14   TYPE       5 MIN
PRESET TIME      300 SEC               GEOMETRY   SHELF 1         0.250
ELAPSED TIME     316 SEC               VOLUME     UG         10822.000
LIVE TIME        300 SEC               DETECTOR   GELI 15

CALIBRATION DATE      5OCT79 1357:49   KEV/CH         0.500
                                       OFFSET         0.543

                      NORMALIZATION CONSTANTS     GAMMA
FWHM               5   A =    2.000             SLOPE        0.500 E-3
SENSITIVITY       16   B =   10.000             OFFSET       4.500
LIBRARY NUMBER     1   ENERGY TOLERANCE     1.25
HALF-LIFE RATIO    8   ABUNDANCE LIMIT (%)  80.00

    995    131    111    117    113    122    101    109
   1002    122    106    101    101    123    106    117
   1009    118    111    115    102    114    102     94
   1016    109    124    106    113    114    153    157
   1023    171    152    135    130    114     94    102
   1030     98     90    106     88     97    117     86
   1037    105    110     89    101    100    100     92
   1044    115     93     96    113    109     83     86
PERCENT COPPER                           .2044
   % RSD COUNTING      15.0
   1101    121    103    120    123    114    104    130
   1108    112    137    119    124    130    153    232
   1115    499   1080   2415   4057   5065   4208   2527
   1122   1085    491    569   1309   3399   7483  12540
   1129  14851  12247   7053   2819    754    210     90
   1136     61     57     50     37     54     47     50
   1143     57     58     54     47     41     40     38
   1150     37     38     41     34     45     32     33
PERCENT ANTIMONY                         .7654
   % RSD COUNTING       .4
   1287     24     25     29     32     48     44     46
   1294     39     38     24     22     26     23     23
   1301     20     27     21     19     20     19     24
   1308     28     24     25     49    118    203    371
   1315    516    496    350    182     74     23     19
   1322     18     10     18     18     20     18     21
   1329     24     37     45     55     42     28     29
   1336     23     22     14     28     16     24     16
PERCENT ARSENIC                          .1638
   % RSD COUNTING       2.3
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64      768 MIN.
                 ANTIMONY      1129             SB-122    4043 MIN.
                 ARSENIC       1315             AS-76     1584 MIN.
COUNTS/MICROGRAM COPPER       256.51  BACKGROUND SPACING:
                 ANTIMONY     168.17     COPPER    25
                 ARSENIC       34.89     ANTIMONY  25
CONSTANTS.                               ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0915:36

91119065 RF   PB   03011

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0218:43   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   309 SEC   VOLUME   UG   7031.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

                  NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

    994   72   65   63   73   61   58   75
   1001   64   65   68   74   56   59   81
   1008   59   68   66   69   69   63   55
   1015   91   73   54   73   82   73   82
   1022   90   81   69   91   70   57   67
   1029   69   48   70   60   67   55   48
   1036   70   55   70   54   63   77   69
   1043   57   61   51   55   72   55   73
PERCENT COPPER   .0032
   % RSD COUNTING   24.4
   1101   57   64   79   85   74   60   63
   1108   75   77   92   74   83   102   133
   1115   217   604   1279   2248   2909   2448   1491
   1122   639   331   279   710   1955   4403   7822
   1129   9657   8061   4807   1881   499   102   51
   1136   31   23   20   19   20   19   26
   1143   31   33   24   27   22   17   25
   1150   21   17   18   21   25   20   13
PERCENT ANTIMONY   .7536
   % RSD COUNTING   .5
   1287   12   12   18   22   25   38   38
   1294   28   31   20   15   12   17   19
   1301   13   14   14   12   19   16   7
   1308   17   15   18   27   64   127   234
   1315   277   274   237   109   37   17   12
   1322   8   18   13   13   14   10   12
   1329   15   26   24   34   34   18   14
   1336   11   11   10   18   19   9   14
PERCENT ARSENIC   .1473
   % RSD COUNTING   3.0
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   4JAN80 0917:29

91119065 RF   PB   Q301J

SAMPLE TIME		3JAN80 1135:00	LOCATION	AFRRI I			
ACQUISITION TIME		4JAN80 0224:06	TYPE	5 MIN			
PRESET TIME	300 SEC		GEOMETRY	SHELF 1	0.250		
ELAPSED TIME	316 SEC		VOLUME	UG	11343.000		
LIVE TIME	300 SEC		DETECTOR	GELI 15			

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000	SLOPE	0.500 E-3	
SENSITIVITY	16	B =	10.000	OFFSET	4.500	
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25			
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00			

995	92	138	113	98	110	115	135
1002	103	113	124	118	118	104	118
1009	96	119	92	108	99	105	102
1016	101	98	123	120	114	151	146
1023	149	135	138	122	110	103	83
1030	89	111	100	103	104	107	88
1037	88	121	95	100	92	89	98
1044	111	94	118	111	84	108	106

PERCENT COPPER   .0028
   % RSD COUNTING   22.5

1101	134	94	106	111	104	119	131
1108	116	120	113	138	127	170	236
1115	484	1022	2302	3738	4493	3890	2251
1122	1023	446	558	1339	3342	7625	12763
1129	15251	12701	7062	2719	717	184	73
1136	84	64	50	38	50	43	40
1143	50	57	39	45	38	39	29
1150	31	40	39	39	32	25	32

PERCENT ANTIMONY   .7451
   % RSD COUNTING   .4

1287	22	24	23	29	41	47	53
1294	46	39	40	22	23	33	20
1301	23	31	19	20	24	25	31
1308	32	33	39	50	123	227	394
1315	463	442	340	166	64	38	11
1322	13	18	24	23	15	24	35
1329	29	39	43	46	45	44	31
1336	23	21	28	28	22	18	22

PERCENT ARSENIC   .1491
   % RSD COUNTING   2.4

CENTROID CHANNEL COPPER	1023	HALF-LIFE CU-64	768 MIN.		
ANTIMONY	1129	SB-122	4043 MIN.		
ARSENIC	1315	AS-76	1584 MIN.		
COUNTS/MICROGRAM COPPER	256.51	BACKGROUND SPACING:			
ANTIMONY	168.17	COPPER	25		
ARSENIC	34.89	ANTIMONY	25		
CONSTANTS:		ARSENIC	10		
E=2.7183		BACKGROUND CHANNELS 10			
LN2=.69315					

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0919:23

91119065 RF            PB                        Q301K

SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         4JAN80 0229:35    TYPE       5 MIN
PRESET TIME      300 SEC                   GEOMETRY   SHELF 1      0.250
ELAPSED TIME     315 SEC                   VOLUME     UG        9602.000
LIVE TIME        300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH        0.500
                                           OFFSET        0.543

                    NORMALIZATION CONSTANTS      GAMMA
FWHM              5    A =    2.000         SLOPE         0.500 E-3
SENSITIVITY     16    B =   10.000         OFFSET        4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)   80.00

     994       104      107      110      108       84      108      119
    1001       101      116      118      108      103      102      106
    1008        90      102      102      106       91       82       86
    1015       104       96      110      106      133      131      139
    1022       140      148      121      148      105       93      117
    1029       116       87       91       89       93       78       90
    1036       113       94       83       99       89       88      103
    1043       117       98      102       88       96       87       96
PERCENT  COPPER                        .0049
   % RSD COUNTING      15.0
    1101       112      111      116      117       99      100      141
    1108       123      103      135      120      140      155      229
    1115       462     1068     2325     3955     4796     4051     2360
    1122       951      428      514     1188     3159     7151    11923
    1129     14147    11680     6694     2525      656      201       68
    1136        64       47       46       50       34       38       36
    1143        53       44       57       40       44       37       46
    1150        43       43       34       29       33       30       33
PERCENT  ANTIMONY                      .8205
   % RSD COUNTING        .4
    1287        25       30       28       28       39       54       47
    1294        45       33       35       28       24       34       22
    1301        21       29       27       27       24       30       20
    1308        24       28       40       53      106      210      352
    1315       521      493      336      169       73       32       22
    1322        23       16       23       13       23       37       38
    1329        28       41       42       60       38       31       29
    1336        24       11       17       24       21       19       16
PERCENT  ARSENIC                       .1783
   % RSD COUNTING       2.4
CENTROID CHANNEL COPPER        1022    HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129              SB-122   4043 MIN.
                 ARSENIC       1315              AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51    BACKGROUND SPACING:
                 ANTIMONY    168.17       COPPER    25
                 ARSENIC      34.89       ANTIMONY  25
CONSTANTS:                                ARSENIC   10
    E=2.7183                           BACKGROUND CHANNELS 10
    LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0921:16

91119065 RF              PB                        0301L

SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         4JAN80 0235:03    TYPE       5 MIN
PRESET TIME      300 SEC                   GEOMETRY   SHELF 1      0.250
ELAPSED TIME     319 SEC                   VOLUME     UG       12508.000
LIVE TIME        300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH         0.500
                                           OFFSET         0.543

                         NORMALIZATION CONSTANTS   GAMMA
FWHM             5    A =    2.000          SLOPE          0.500 E-3
SENSITIVITY      16   B =   10.000          OFFSET         4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE       1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)   80.00

   995     148     121     122     127     133     126     121
  1002     134     135     146     123     112     144     128
  1009     133     129     127     128     130     135     111
  1016     132     144     123     139     154     162     181
  1023     156     172     166     153     147     132     128
  1030     125     104     119     113     128     131     117
  1037     102     121     135     106     124     126     114
  1044     114     126     134     116     136     137     110
PERCENT COPPER                           .0036
   % RSD COUNTING        17.2
  1101     130     134     130     144     124     116     149
  1108     153     162     148     166     178     217     275
  1115     560    1333    2902    4581    5515    4444    2566
  1122    1154     610     693    1726    4476    9974   15863
  1129   18288   14814    8079    3119     922     216      99
  1136      78      76      55      51      78      69      65
  1143      51      70      59      54      45      44      46
  1150      37      58      49      32      37      44      42
PERCENT ANTIMONY                         .8218
   % RSD COUNTING         .3
  1287      32      39      41      44      53      62      51
  1294      60      54      35      38      43      36      31
  1301      25      25      22      26      23      29      34
  1308      27      25      39      69     148     276     473
  1315     594     569     391     181      68      32      36
  1322      31      27      23      33      25      26      37
  1329      32      42      57      50      58      40      43
  1336      20      28      22      23      23      23      27
PERCENT ARSENIC                          .1662
   % RSD COUNTING         2.1
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129             SB-122  4043 MIN.
                 ARSENIC       1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER       256.51  BACKGROUND SPACING:
                 ANTIMONY     168.17     COPPER    25
                 ARSENIC       34.89     ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                            BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0923:09

91119065 RF              PB                      0301M

SAMPLE TIME             3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME        4JAN80 0240:35   TYPE       5 MIN
PRESET TIME      300 SEC                 GEOMETRY   SHELF 1      0.250
ELAPSED TIME     316 SEC                 VOLUME     UG        10895.000
LIVE TIME        300 SEC                 DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH        0.500
                                         OFFSET        0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM              5    A =    2.000       SLOPE        0.500 E-3
SENSITIVITY      16    B =   10.000       OFFSET       4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00

     995     108     123     100     120     131     114     112
    1002     101     124     115      89     115     108      98
    1009     118      95     126     113     119     123     110
    1016      97     115     123     118     125     132     139
    1023     147     135     161     133     112     134     101
    1030      96     106     111      97     120      98     115
    1037      97     115     106     102     113      86     106
    1044     106     114     105      96     100      97     115
PERCENT COPPER                           .0032
    % RSD COUNTING      20.7
    1101      93     133     117     100     129     119     124
    1108     127     114     166     112     173     154     244
    1115     462    1134    2474    4005    4906    3935    2261
    1122    1021     497     603    1351    3784    8161   13156
    1129   15657   13068    7300    2715     726     183      92
    1136      70      50      58      42      61      57      50
    1143      53      53      54      44      33      39      40
    1150      29      45      35      39      42      30      35
PERCENT ANTIMONY                         .8075
    % RSD COUNTING       .4
    1287      21      29      27      30      41      50      47
    1294      53      35      23      24      28      20      21
    1301      22      20      26      23      13      16      35
    1308      24      31      35      41     115     235     410
    1315     512     508     326     168      65      27      26
    1322      17      25      21      24      21      30      17
    1329      25      32      47      45      47      37      29
    1336      19      29      20      30      15      23      20
PERCENT ARSENIC                          .1651
    % RSD COUNTING       2.3
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64    768 MIN.
                 ANTIMONY      1129             SB-122  4043 MIN.
                 ARSENIC       1315             AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER      256.51   BACKGROUND SPACING:
                 ANTIMONY    168.17      COPPER    25
                 ARSENIC      34.89      ANTIMONY 25
CONSTANTS:                               ARSENIC  10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0925:03

91119065 RF            FB                    Q301N

SAMPLE TIME          3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME     4JAN80 0246:05   TYPE       5 MIN
PRESET TIME     300 SEC               GEOMETRY   SHELF 1      0.250
ELAPSED TIME    311 SEC               VOLUME     UG         9379.000
LIVE TIME       300 SEC               DETECTOR   GELI 15

CALIBRATION DATE      5OCT79 1357:49  KEV/CH        0.500
                                      OFFSET        0.543

                      NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2.000             SLOPE       0.500 E-3
SENSITIVITY     16   B =   10.000             OFFSET      4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE    1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

    995       84       74       90       66       67       84       81
   1002       79       83       80       68       80       81       71
   1009       77       74       83       79       75       76       70
   1016       82       61       79       85      106      112      104
   1023      125       97       88       98       85       66       65
   1030       68       71       72       77       66       69       72
   1037       73       73       83       71       62       66       62
   1044       72       69       65       60       76       65       76
PERCENT  COPPER                        .0042
   % RSD COUNTING      15.7
   1101       90      112       74       72       84       85       88
   1108       85       92       92       98      100      121      171
   1115      274      688     1463     2474     2976     2583     1572
   1122      687      352      400      893     2384     5645     9396
   1129    11309     9682     5650     2233      575      142       50
   1136       37       43       30       24       20       30       35
   1143       34       40       24       26       17       25       29
   1150       24       23       31       23       17       21       24
PERCENT  ANTIMONY                      .6812
   % RSD COUNTING       .4
   1287       20       15       17       29       31       42       29
   1294       36       19       15       15       14       23       18
   1301       11       12       18       13       19       15       15
   1308       11       16       21       35       63      124      241
   1315      317      336      238      128       38       20       10
   1322       13       20       20        7       15        8       14
   1329        7       22       26       26       38       26       16
   1336       11       15       21       16       15       25       15
PERCENT  ARSENIC                       .1222
   % RSD COUNTING       2.9
CENTROID CHANNEL COPPER        1023   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY      1129             SB-122   4043 MIN.
                 ARSENIC       1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER      256.51   BACKGROUND SPACING:
                 ANTIMONY    168.17      COPPER    25
                 ARSENIC      34.89      ANTIMONY  25
CONSTANTS:                              ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0926:56

91119065 RF          PB                      Q3010

SAMPLE TIME             3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME        4JAN80 0251:29   TYPE       5 MIN
PRESET TIME      300 SEC                 GEOMETRY   SHELF 1        0.250
ELAPSED TIME     313 SEC                 VOLUME     UG          9170.000
LIVE TIME        300 SEC                 DETECTOR   GELI .15

CALIBRATION DATE        5OCT79 1357:49   KEV/CH        0.500
                                         OFFSET        0.543

                     NORMALIZATION CONSTANTS    GAMMA
FWHM              5   A =    2.000           SLOPE       0.500 E-3
SENSITIVITY     16   B =   10.000           OFFSET      4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE    1.25
HALF-LIFE RATIO  8   ABUNDANCE LIMIT (%)  80.00

   993      84      98      79      87      90     100      92
  1000      90      56      84      78      89      77      96
  1007      89      71      89      95      85      82      85
  1014      79      86      75     107      99      91     121
  1021     100     128     116     109      97      88      87
  1028      83      89      84      95      86      73      96
  1035      71      93      71      87      84      92      72
  1042      86      63      83      83      76      85      80
PERCENT COPPER                      .0031
  % RSD COUNTING       22.9
  1101     103      79      98     112      84     111      93
  1108     104      99     112      86      95     140     202
  1115     326     750    1762    3034    3810    3210    1987
  1122     843     392     415     977    2694    5849   10301
  1129   12447   10561    6000    2335     696     135      55
  1136      44      53      42      36      42      32      34
  1143      41      40      30      19      25      22      33
  1150      28      28      35      31      31      32      18
PERCENT ANTIMONY                    .7554
  % RSD COUNTING        .4
  1287      15      20      13      29      31      28      34
  1294      46      24      28      17      18      22      14
  1301      22      18      18      12      19      24      19
  1308      12      20      19      34      70     180     310
  1315     394     407     280     122      51      28      21
  1322      17      12       9      19      19      21      15
  1329      27      29      39      35      45      36      15
  1336      15      16      21      19      14      13      19
PERCENT ARSENIC                     .1534
  % RSD COUNTING       2.6
CENTROID CHANNEL COPPER      1021   HALF-LIFE CU-64     768 MIN.
                 ANTIMONY    1129             SB-122   4043 MIN.
                 ARSENIC     1315             AS-76    1584 MIN.
COUNTS/MICROGRAM COPPER    256.51   BACKGROUND SPACING:
                 ANTIMONY  168.17     COPPER    25
                 ARSENIC    34.89     ANTIMONY  25
CONSTANTS:                            ARSENIC   10
   E=2.7183                         BACKGROUND CHANNELS 10
   LN2=.69315
```

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0928:50

91119065 RF   PB   Q301P

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0256:55   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   317 SEC   VOLUME   UG   13733.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

   994   127   137   118   99   123   109   135
  1001   123   125   126   131   124   133   123
  1008   114   120   119   123   112   124   114
  1015   101   104   127   113   159   145   167
  1022   166   154   163   147   117   125   117
  1029   122   117   113   111   105   118   121
  1036   128   109   123   114   119   118   118
  1043   101   89   106   115   98   123   108
PERCENT COPPER   .0039
   % RSD COUNTING   14.2
  1101   120   150   134   128   128   128   127
  1108   135   129   159   157   155   169   272
  1115   543   1181   2500   4010   4825   4101   2320
  1122   1012   518   648   1514   4001   8713   14532
  1129   17078   13994   7579   2902   864   209   111
  1136   82   65   57   47   61   60   65
  1143   68   50   42   48   49   44   47
  1150   41   46   53   40   35   30   44
PERCENT ANTIMONY   .6921
   % RSD COUNTING   .3
  1287   29   23   28   26   41   56   69
  1294   49   38   34   35   27   19   26
  1301   32   24   31   17   35   23   19
  1308   25   34   43   59   108   233   415
  1315   557   518   327   163   76   26   30
  1322   25   18   22   25   33   19   22
  1329   28   41   41   56   53   34   35
  1336   27   19   28   21   15   36   18
PERCENT ARSENIC   .1345
   % RSD COUNTING   2.3
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   4JAN80 0930:43

91119065 RF   PB   Q3010

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I
ACQUISITION TIME	4JAN80 0302:26	TYPE	5 MIN
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	318 SEC	VOLUME	UG 13599.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE	5OCT79 1357:49	KEV/CH	0.500
		OFFSET	0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25	
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00	

994	126	141	137	119	127	136	117
1001	128	133	121	121	115	109	96
1008	101	120	119	130	112	119	115
1015	116	118	125	129	127	143	158
1022	172	168	139	135	108	106	111
1029	123	108	124	99	132	119	116
1036	124	112	108	111	121	121	107
1043	111	119	108	101	119	121	119

PERCENT COPPER   .0024

% RSD COUNTING   23.9

1101	153	132	107	133	132	131	125
1108	132	128	130	151	180	182	279
1115	496	1193	2571	4091	4887 ·	4052	2351
1122	1038	558	658	1606	4145	9054	14736
1129	17304	14088	7897	2948	837	233	106
1136	75	67	64	58	58	59	56
1143	58	70	58	55	49	47	46
1150	43	40	42	38	39	43	36

PERCENT ANTIMONY   .7139

% RSD COUNTING   .3

1287	27	38	37	37	43	77	66
1294	59	42	34	35	29	36	32
1301	24	25	18	20	26	26	25
1308	23	32	39	62	140	245	432
1315	540	525	350	164	63	29	35
1322	24	25	25	20	19	25	25
1329	26	42	61	52	61	59	31
1336	21	20	15	21	23	23	28

PERCENT ARSENIC   .1415

% RSD COUNTING   2.2

CENTROID CHANNEL	COPPER	1022	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:	
	ANTIMONY	168.17	COPPER 25	
	ARSENIC	34.89	ANTIMONY 25	

CONSTANTS: ARSENIC   10
  E=2.7183   BACKGROUND CHANNELS 10
  LN2=.69315

EXPERIMENT 1   4JAN80 0932:37

91119065 RF   PB   Q301R

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0307:57   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   313 SEC   VOLUME   UG   11736.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                        OFFSET   0.543

                      NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

   994   95   107   88   97   86   89   79
  1001   74   89   94   82   97   85   75
  1008   81   76   82   77   78   74   87
  1015   89   66   89   91   105   120   120
  1022   118   104   111   120   95   79   95
  1029   91   86   75   78   83   96   72
  1036   86   85   72   71   87   72   66
  1043   84   105   80   59   85   83   88
PERCENT COPPER   .0038
   % RSD COUNTING   19.2
  1101   86   95   82   100   82   82   82
  1108   99   102   92   97   112   116   175
  1115   333   654   1504   2704   3271   2776   1566
  1122   752   373   414   1003   2738   6229   10522
  1129   13053   10896   6176   2428   680   155   65
  1136   43   54   45   34   36   38   31
  1143   40   39   30   46   27   31   34
  1150   34   22   22   33   22   21   32
PERCENT ANTIMONY   .6144
   % RSD COUNTING   .4
  1287   17   24   20   19   28   42   36
  1294   43   25   26   16   15   17   14
  1301   16   22   18   14   22   14   22
  1308   17   12   26   45   60   155   228
  1315   366   329   250   103   45   23   15
  1322   19   18   17   10   16   11   16
  1329   26   23   31   34   29   28   24
  1336   17   20   12   20   19   19   14
PERCENT ARSENIC   .1012
   % RSD COUNTING   2.9
CENTROID CHANNEL COPPER   1022   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1129   SB-122 4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51 BACKGROUND SPACING:
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

EXPERIMENT 1   4JAN80 0934:30

91119065 RF   PB   Q3015

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I
ACQUISITION TIME	4JAN80 0313:23	TYPE	5 MIN
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	317 SEC	VOLUME	UG 11794.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

995	110	111	109	131	126	132	104
1002	103	118	111	101	113	98	117
1009	110	105	109	123	129	112	95
1016	109	140	122	112	145	135	135
1023	173	147	145	134	104	102	90
1030	105	100	112	121	103	116	110
1037	96	99	101	112	110	109	101
1044	105	99	116	96	113	95	94

PERCENT COPPER   .0035
% RSD COUNTING   18.6

1101	122	115	123	132	138	110	123
1108	135	140	132	143	161	193	274
1115	507	1154	2480	4076	4843	3926	2395
1122	995	482	632	1478	3774	8533	13887
1129	16690	13537	7665	2813	826	180	106
1136	76	64	60	48	55	45	49
1143	54	60	48	50	31	35	42
1150	44	41	43	36	35	37	31

PERCENT ANTIMONY   .7863
% RSD COUNTING   .3

1287	29	18	24	26	52	68	55
1294	50	46	24	25	21	30	26
1301	23	25	22	31	27	22	19
1308	20	27	37	71	98	253	411
1315	557	479	322	172	73	37	16
1322	29	20	20	16	15	30	20
1329	27	39	41	57	54	35	30
1336	23	28	30	13	22	24	23

PERCENT ARSENIC   .1566
% RSD COUNTING   2.3

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:	
	ANTIMONY	168.17	COPPER	25
	ARSENIC	34.89	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS 10	
LN2=.69315				

EXPERIMENT 1   4JAN80 0936:24

91119065 RF   PB   Q301T

SAMPLE TIME	3JAN80 1135:00	LOCATION AFRRI I
ACQUISITION TIME	4JAN80 0318:53	TYPE 5 MIN
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 315 SEC		VOLUME UG 11225.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                       OFFSET   0.543

                   NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER 1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO 8   ABUNDANCE LIMIT (%) 80.00

993	94	99	103	106	111	88	107
1000	92	108	99	94	105	106	107
1007	109	101	107	97	110	87	108
1014	102	107	112	103	122	112	141
1021	159	163	149	129	120	99	99
1028	99	106	96	96	111	110	88
1035	86	99	88	90	90	99	103
1042	106	101	84	110	104	91	94

PERCENT COPPER   .0045
   % RSD COUNTING   14.4

1101	98	119	119	96	117	118	124
1108	117	121	133	130	128	152	215
1115	472	1149	2253	3834	4572	3773	2175
1122	946	464	530	1287	3514	7770	12916
1129	15131	12539	7096	2693	745	179	80
1136	62	56	51	40	41	47	43
1143	66	42	53	46	35	25	38
1150	36	36	34	34	38	26	32

PERCENT ANTIMONY   .7621
   % RSD COUNTING   .4

1287	14	22	21	22	39	46	55
1294	42	44	30	21	20	18	26
1301	21	13	15	27	22	25	26
1308	25	23	30	65	87	186	367
1315	456	466	366	158	61	32	23
1322	21	30	21	22	19	22	22
1329	22	34	40	51	51	26	24
1336	21	25	14	25	23	28	21

PERCENT ARSENIC   .1487
   % RSD COUNTING   2.4

CENTROID CHANNEL	COPPER	1021	HALF-LIFE	CU-64	768 MIN.
	ANTIMONY	1129		SB-122	4043 MIN.
	ARSENIC	1315		AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:		
	ANTIMONY	168.17	COPPER	25	
	ARSENIC	34.89	ANTIMONY	25	
CONSTANTS:			ARSENIC	10	
E=2.7183			BACKGROUND CHANNELS 10		
LN2=.69315					

EXPERIMENT 1   4JAN80 0938:17

91119065 RF   PB   Q299P

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I
ACQUISITION TIME	4JAN80 0324:22	TYPE	5 MIN
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	310 SEC	VOLUME	UG 7361.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE	5OCT79 1357:49	KEV/CH	0.500
		OFFSET	0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A =	2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B =	10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25			
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00			

995	75	75	72	70	83	68	68
1002	68	60	68	80	79	72	75
1009	79	75	47	60	72	73	76
1016	58	48	59	77	87	97	99
1023	102	112	93	100	59	75	72
1030	62	77	75	62	59	62	61
1037	61	67	82	69	66	64	67
1044	69	79	63	73	67	74	63

PERCENT COPPER   .0048
% RSD COUNTING   17.7

1101	97	93	78	73	89	91	68
1108	72	74	96	85	94	102	152
1115	289	701	1443	2515	3238	2646	1671
1122	705	334	375	812	2253	5011	8726
1129	10811	9054	5168	2061	549	126	51
1136	36	24	34	27	27	23	28
1143	26	32	32	29	25	39	24
1150	22	19	23	28	16	23	20

PERCENT ANTIMONY   .8126
% RSD COUNTING   .4

1287	14	16	15	17	19	36	32
1294	26	25	22	13	16	13	14
1301	12	12	12	25	23	13	15
1308	17	20	22	36	61	138	255
1315	334	322	250	104	46	25	11
1322	7	12	14	19	11	18	21
1329	18	23	23	30	33	25	16
1336	12	17	9	21	16	13	15

PERCENT ARSENIC   .1594
% RSD COUNTING   2.9

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:	
	ANTIMONY	168.17	COPPER	25
	ARSENIC	34.89	ANTIMONY	25

CONSTANTS: ARSENIC   10
  E=2.7183   BACKGROUND CHANNELS 10
  LN2=.69315

```
FBI LAB WASHINGTON DC

EXPERIMENT 1    4JAN80 0940:10

91119065 RF              PB                        626A

SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         4JAN80 0329:46    TYPE       5 MIN
PRESET TIME     300 SEC                    GEOMETRY   SHELF 1      0.250
ELAPSED TIME    308 SEC                    VOLUME     UG        8471.000
LIVE TIME       300 SEC                    DETECTOR   GELI 15

CALIBRATION DATE        5OCT79 1357:49     KEV/CH        0.500
                                           OFFSET        0.543

                        NORMALIZATION CONSTANTS   GAMMA
FWHM              5    A =     2.000        SLOPE        0.500 E-3
SENSITIVITY     16    B =    10.000        OFFSET       4.500
LIBRARY NUMBER   1    ENERGY TOLERANCE     1.25
HALF-LIFE RATIO  8    ABUNDANCE LIMIT (%)  80.00

   994      63      57      61      62      57      68      71
  1001      62      78      55      58      51      72      71
  1008      72      63      56      66      53      67      61
  1015      92      94     137     175     280     428     593
  1022     741     727     576     444     271     196     119
  1029      72      65      63      65      59      52      50
  1036      46      65      43      57      57      58      58
  1043      54      53      50      53      47      38      66
PERCENT COPPER                          .0741
   % RSD COUNTING      1.9
  1101      52      66      59      68      48      60      68
  1108      65      75      63      72      75      62      68
  1115      74      80      85     149     138     137     119
  1122     111     144     307     768    2085    4967    8829
  1129   11293    9633    5525    2046     568     101      37
  1136      27      19      25      12      20      21      15
  1143      14      23      19      11      11      20      21
  1150      15      10      17      11      16       8      10
PERCENT ANTIMONY                        .7301
   % RSD COUNTING      .4
  1286       6      10      12      14      15      14      26
  1293      30      27      25       9       8       9      15
  1300      11      11       6      10      11       5       4
  1307      10       8      10      11      11       6      13
  1314       8      16      13      16       8       6      11
  1321       7       9       5       5       9       6       4
  1328       7       7       7       6       6      13       5
  1335       9      11       6       5       7      11       8
PERCENT ARSENIC                         .0034
   % RSD COUNTING     33.7
CENTROID CHANNEL COPPER       1022    HALF-LIFE CU-64    768 MIN.
                 ANTIMONY     1129              SB-122  4043 MIN.
                 ARSENIC      1314              AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER     256.51    BACKGROUND SPACING:
                 ANTIMONY   168.17       COPPER    25
                 ARSENIC     34.89       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
    E=2.7183                          BACKGROUND CHANNELS 10
    LN2=.69315
```

EXPERIMENT 1   4JAN80 0942:03

91119065 RF   PB   626B

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I
ACQUISITION TIME	4JAN80 0335:08	TYPE	5 MIN
PRESET TIME	300 SEC	GEOMETRY	SHELF 1 0.250
ELAPSED TIME	310 SEC	VOLUME	UG 9789.000
LIVE TIME	300 SEC	DETECTOR	GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000		SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000		OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE	1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%)	80.00		

994	63	70	71	69	70	82	63
1001	72	74	72	65	81	62	74
1008	87	53	65	58	80	77	87
1015	82	112	152	215	340	545	699
1022	851	841	701	552	328	190	132
1029	86	91	67	55	40	55	75
1036	58	72	61	74	56	65	49
1043	54	58	49	54	53	46	69

PERCENT COPPER   .0775
% RSD COUNTING   1.7

1101	63	75	68	55	55	60	61
1108	85	63	63	69	69	71	78
1115	99	95	110	138	172	148	129
1122	152	190	324	896	2441	5822	10315
1129	12474	10739	5983	2408	636	133	57
1136	21	28	32	25	17	18	21
1143	14	20	13	19	16	14	11
1150	25	21	13	15	14	13	11

PERCENT ANTIMONY   .7155
% RSD COUNTING   .4

1287	13	12	9	18	25	33	33
1294	31	16	14	13	16	11	10
1301	7	16	6	9	12	8	12
1308	8	6	10	9	16	13	16
1315	13	26	15	14	8	5	9
1322	13	7	11	6	9	6	12
1329	4	13	12	14	9	12	8
1336	8	7	6	16	12	14	13

PERCENT ARSENIC   .0047
% RSD COUNTING   24.9

CENTROID CHANNEL	COPPER	1022	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:	
	ANTIMONY	168.17	COPPER	25
	ARSENIC	34.89	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS	10
LN2=.69315				

EXPERIMENT 1   4JAN80 0943:57

91119065 RF   PB   626C

```
SAMPLE TIME              3JAN80 1135:00    LOCATION   AFRRI I
ACQUISITION TIME         4JAN80 0340:31    TYPE       5 MIN
PRESET TIME      300 SEC                   GEOMETRY   SHELF 1        0.250
ELAPSED TIME     308 SEC                   VOLUME     UG          8675.000
LIVE TIME        300 SEC                   DETECTOR   GELI 15

CALIBRATION DATE         5OCT79 1357:49    KEV/CH          0.500
                                           OFFSET          0.543

                  NORMALIZATION CONSTANTS     GAMMA
FWHM              5    A =    2.000         SLOPE      0.500 E-3
SENSITIVITY      16    B =   10.000         OFFSET     4.500
LIBRARY NUMBER    1    ENERGY TOLERANCE      1.25
HALF-LIFE RATIO   8    ABUNDANCE LIMIT (%)  80.00

    995      64      58      68      65      57      79      59
   1002      49      60      59      53      77      53      62
   1009      52      72      70      59      49      59      86
   1016      82     122     219     327     465     633     767
   1023     801     699     525     335     209     136      95
   1030      53      52      54      50      55      49      54
   1037      46      54      40      48      49      38      50
   1044      39      54      50      47      51      52      48
```

PERCENT COPPER   .0822
```
   % RSD COUNTING       1.7
   1101      58      52      55      64      72      60      77
   1108      71      76      65      51      77      74      81
   1115      64      76      96     138     161     119     132
   1122     142     158     291     762    2026    4993    8816
   1129   11225    9589    5588    2160     630     145      41
   1136      21      18      21      15      26      18      12
   1143      14      15      10      18      15      17      15
   1150      13      14      17      16      13      14      18
```

PERCENT ANTIMONY   .7144
```
   % RSD COUNTING       .4
   1288      12      13      12      17      23      43      23
   1295      23      12       5      11      11      10      13
   1302       7       7       7       8       6       8      12
   1309       6       8       8       9       6      10      19
   1316      13      17      14      10       6       9      10
   1323       9      14       9       5      11      12       9
   1330       9       8       9       9       7       3      14
   1337       9       7       7      11      11       9       7
```

PERCENT ARSENIC   .0024
```
   % RSD COUNTING      50.3
CENTROID CHANNEL  COPPER       1023    HALF-LIFE  CU-64    768 MIN.
                  ANTIMONY     1129               SB-122  4043 MIN.
                  ARSENIC      1316               AS-76   1584 MIN.
COUNTS/MICROGRAM  COPPER     256.51    BACKGROUND SPACING:
                  ANTIMONY   168.17       COPPER    25
                  ARSENIC     34.89       ANTIMONY  25
CONSTANTS:                               ARSENIC   10
   E=2.7183                           BACKGROUND CHANNELS 10
   LN2=.69315
```

EXPERIMENT 1   4JAN80 0945:50

91119065 RF   PB   604A

SAMPLE TIME	3JAN80 1135:00	LOCATION AFRRI I
ACQUISITION TIME	4JAN80 0345:53	TYPE 5 MIN
PRESET TIME 300 SEC		GEOMETRY SHELF 1 0.250
ELAPSED TIME 328 SEC		VOLUME UG 9802.000
LIVE TIME 300 SEC		DETECTOR GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

NORMALIZATION CONSTANTS   GAMMA

FWHM	5	A = 2.000	SLOPE	0.500 E-3
SENSITIVITY	16	B = 10.000	OFFSET	4.500
LIBRARY NUMBER	1	ENERGY TOLERANCE 1.25		
HALF-LIFE RATIO	8	ABUNDANCE LIMIT (%) 80.00		

995	181	176	214	174	200	174	196
1002	184	186	198	189	186	189	203
1009	188	191	207	189	182	201	194
1016	200	183	186	192	243	239	259
1023	284	261	244	209	225	226	192
1030	205	171	200	174	164	170	191
1037	155	209	195	187	181	169	166
1044	156	170	174	178	155	184	179

PERCENT COPPER   .0090

% RSD COUNTING   11.5

1101	215	201	216	204	208	184	223
1108	227	221	220	240	233	251	322
1115	526	964	1750	2599	2816	2289	1340
1122	812	801	1552	3864	9507	19495	29948
1129	33171	25445	13635	5000	1494	466	262
1136	193	164	148	119	105	101	110
1143	94	102	99	74	64	72	80
1150	61	81	77	66	74	59	59

PERCENT ANTIMONY   1.9396

% RSD COUNTING   .2

1287	41	47	49	51	72	103	116
1294	97	58	45	47	59	44	43
1301	46	44	34	38	39	31	35
1308	40	40	40	51	93	185	255
1315	310	283	221	90	61	37	32
1322	38	32	28	33	34	41	39
1329	37	39	41	43	46	48	44
1336	43	30	32	38	43	33	35

PERCENT ARSENIC   .1069

% RSD COUNTING   3.4

CENTROID CHANNEL COPPER	1023	HALF-LIFE CU-64	768 MIN.
ANTIMONY	1129	SB-122	4043 MIN.
ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM COPPER	256.51	BACKGROUND SPACING:	
ANTIMONY	168.17	COPPER 25	
ARSENIC	34.89	ANTIMONY 25	

CONSTANTS: ARSENIC   10
    E=2.7183   BACKGROUND CHANNELS 10
    LN2=.69315

EXPERIMENT 1   4JAN80 0947:44

91119065 RF   PB   604B

SAMPLE TIME   3JAN80 1135:00   LOCATION   AFRRI I
ACQUISITION TIME   4JAN80 0351:34   TYPE   5 MIN
PRESET TIME   300 SEC   GEOMETRY   SHELF 1   0.250
ELAPSED TIME   339 SEC   VOLUME   UG   14135.000
LIVE TIME   300 SEC   DETECTOR   GELI 15

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                         OFFSET   0.543

                     NORMALIZATION CONSTANTS · GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

     993   293   297   287   289   276   274   323
    1000   290   268   277   280   256   287   250
    1007   265   284   261   279   267   289   260
    1014   275   247   285   255   322   304   332
    1021   373   371   357   343   301   286   285
    1028   270   248   249   272   243   274   238
    1035   242   264   275   245   268   255   239
    1042   264   247   241   218   246   234   249
PERCENT COPPER   .0076
   % RSD COUNTING   11.3
    1100   295   283   294   304   283   275   299
    1107   295   295   309   302   289   341   350
    1114   485   807   1513   2682   3488   3758   2863
    1121   1685   1146   1365   2691   6770   16163   30296
    1128   42758   43269   31374   16056   5895   1729   686
    1135   406   303   268   240   211   185   181
    1142   174   173   138   136   144   154   123
    1149   117   107   142   139   106   110   136
PERCENT ANTIMONY   1.8440
   % RSD COUNTING   .2
    1287   60   55   72   101   120   156   135
    1294   142   89   69   77   63   53   61
    1301   62   56   56   58   52   56   61
    1308   66   73   72   108   163   277   372
    1315   431   364   240   141   88   66   44
    1322   38   56   63   66   41   48   69
    1329   57   60   66   82   65   72   58
    1336   64   59   51   67   63   47   57
PERCENT ARSENIC   .0994
   % RSD COUNTING   3.0
CENTROID CHANNEL COPPER   1021   HALF-LIFE CU-64   768 MIN.
                 ANTIMONY   1128   SB-122   4043 MIN.
                 ARSENIC   1315   AS-76   1584 MIN.
COUNTS/MICROGRAM COPPER   256.51   BACKGROUND SPACING: ·
                 ANTIMONY   168.17   COPPER   25
                 ARSENIC   34.89   ANTIMONY 25
CONSTANTS: ARSENIC   10
   E=2.7183   BACKGROUND CHANNELS 10
   LN2=.69315

FBI LAB WASHINGTON DC

EXPERIMENT 1   4JAN80 0949:37

91119065 RF   PB   604C

SAMPLE TIME	3JAN80 1135:00	LOCATION	AFRRI I	
ACQUISITION TIME	4JAN80 0357:27	TYPE	5 MIN	
PRESET TIME	300 SEC	GEOMETRY	SHELF 1	0.250
ELAPSED TIME	321 SEC	VOLUME	UG	8347.000
LIVE TIME	300 SEC	DETECTOR	GELI 15	

CALIBRATION DATE   5OCT79 1357:49   KEV/CH   0.500
                                          OFFSET   0.543

                    NORMALIZATION CONSTANTS   GAMMA
FWHM   5   A =   2.000   SLOPE   0.500 E-3
SENSITIVITY   16   B =   10.000   OFFSET   4.500
LIBRARY NUMBER   1   ENERGY TOLERANCE   1.25
HALF-LIFE RATIO   8   ABUNDANCE LIMIT (%) 80.00

995	161	130	150	154	162	125	147
1002	139	149	142	146	138	148	148
1009	137	141	135	142	152	137	142
1016	180	155	163	166	173	206	212
1023	203	194	165	177	143	130	145
1030	133	139	147	117	131	96	120
1037	143	135	138	131	133	135	135
1044	117	146	134	138	104	120	130

PERCENT COPPER   .0087
   % RSD COUNTING   12.3

1101	151	154	155	139	180	161	147
1108	155	145	163	177	170	160	202
1115	332	687	1184	1898	2263	1842	1250
1122	643	556	908	2443	6196	13756	22426
1129	25432	20379	11773	4414	1221	362	138
1136	87	84	71	81	64	60	66
1143	81	59	66	58	56	44	64
1150	55	57	52	48	41	45	32

PERCENT ANTIMONY   1.7494
   % RSD COUNTING   .3

1287	46	31	31	46	70	82	86
1294	68	60	26	31	31	30	17
1301	30	28	28	30	28	29	25
1308	24	16	27	42	58	145	197
1315	233	210	164	69	35	33	14
1322	27	29	22	22	32	26	24
1329	28	32	36	45	49	30	26
1336	26	37	19	28	29	17	38

PERCENT ARSENIC   .0936
   % RSD COUNTING   4.0

CENTROID CHANNEL	COPPER	1023	HALF-LIFE CU-64	768 MIN.
	ANTIMONY	1129	SB-122	4043 MIN.
	ARSENIC	1315	AS-76	1584 MIN.
COUNTS/MICROGRAM	COPPER	256.51	BACKGROUND SPACING:	
	ANTIMONY	168.17	COPPER	25
	ARSENIC	34.89	ANTIMONY	25
CONSTANTS:			ARSENIC	10
E=2.7183			BACKGROUND CHANNELS	10
LN2=.69315				

9

Lab #
9111906ESQ4

10⁻⁹ Irradiation
1/7/80

91119065 RF LEAD

SAMPLE	SAM. WT.	%-COPPER	%-ANTIMONY		%-ARSENIC
Q328A	17029.000	0.02862	2.41928	<	0.00534
Q228B	12277.000	0.03177	2.67408	<	0.00608
Q328C	11861.000	0.03405	2.80936	<	0.00639
		0.03148 AVG	2.63424 AVG		0.00000 AVG
		0.002727 SD	0.198072 SD		0.000000 SD
		8.663738 %RSD	7.519115 %RSD		0.000000 %RSD
Q329A	11684.000	0.01233	0.32718	<	0.00249
Q329B	13842.000	0.01363	0.34495	<	0.00233
Q329C	11563.000	0.01421	0.37257	<	0.00240
		0.01339 AVG	0.34824 AVG		0.00000 AVG
		0.000963 SD	0.022873 SD		0.000000 SD
		7.194857 %RSD	6.568178 %RSD		0.000000 %RSD
Q330A	12210.000	0.02953	0.65356		0.01236
Q330B	10673.000	0.03086	0.67500		0.01463
Q330C	13097.000	0.03311	0.71920		0.01396
		0.03117 AVG	0.68259 AVG		0.01365 AVG
		0.001809 SD	0.033473 SD		0.001164 SD
		5.804963 %RSD	4.903820 %RSD		8.527825 %RSD
Q331A	8011.000	0.03002	0.63093		0.00754
Q331B	9696.000	0.03266	0.66823		0.00934
Q331C	10386.000	0.03520	0.68713		0.00913
		0.03263 AVG	0.66210 AVG		0.00867 AVG
		0.002586 SD	0.028595 SD		0.000988 SD
		7.926798 %RSD	4.318877 %RSD		11.397960 %RSD
Q332A	11093.000	0.01286	0.62723	<	0.00468
Q332B	12522.000	0.01546	0.67825		0.00592
Q332C	9862.000	0.01615	0.71517		0.00354
		0.01482 AVG	0.67355 AVG		0.00473 AVG
		0.001735 SD	0.044158 SD		0.001685 SD
		11.708145 %RSD	6.556028 %RSD		35.611404 %RSD
Q333A	12598.000	0.00632	0.64503°		0.00596
Q333B	11767.000	0.00611	0.71616	<	0.00475
Q333C	11840.000	0.00938	0.76154	<	0.00487
		0.00727 AVG	0.70757 AVG		0.00596 AVG
		0.001831 SD	0.058727 SD		0.000000 SD
		25.184472 %RSD	8.299748 %RSD		0.000000 %RSD
Q334A	9873.000	0.00659	0.68514		0.00554
Q334B	11470.000	0.00746	0.71630		0.00462
Q334C	13249.000	0.00656	0.73918		0.00542
		0.00687 AVG	0.71354 AVG		0.00520 AVG
		0.000511 SD	0.027128 SD		0.000499 SD

Q335A	11855.000	0.00528	0.58●●9		0.01043
Q335B	14080.000	0.00521	0.61935		0.00789
Q335C	9464.000	0.00484	0.63558		0.00832
		0.00511 AVG	0.61367 AVG		0.00888 AVG
		0.000237 SD	0.025224 SD		0.001359 SD
		4.646093 %RSD	4.110315 %RSD		15.311225 %RSD
Q336A	8158.000	0.00686	0.63827		0.00634
Q336B	10453.000	0.00583	0.67052		0.00506
Q336C	11304.000	0.00706	0.71680		0.00791
		0.00658 AVG	0.67519 AVG		0.00644 AVG
		0.000661 SD	0.039473 SD		0.001427 SD
		10.037652 %RSD	5.846119 %RSD		22.165512 %RSD
Q337A	9607.000	0.00580	0.59613		0.01095
Q337B	10572.000	0.00523	0.60551		0.00905
Q337C	9809.000	0.00627	0.63454	<	0.00426
		0.00576 AVG	0.61206 AVG		0.01000 AVG
		0.000521 SD	0.020023 SD		0.005888 SD
		9.037000 %RSD	3.271469 %RSD		58.893085 %RSD
Q338A	11368.000	0.01117	0.61928		0.01727
Q338B	11406.000	0.01080	0.64065		0.01455
Q338C	14742.000	0.01223	0.67925		0.01490
		0.01140 AVG	0.64640 AVG		0.01557 AVG
		0.000742 SD	0.030396 SD		0.001480 SD
		6.513090 %RSD	4.702338 %RSD		9.504572 %RSD
Q339A	9328.000	0.02072	0.68953	<	0.00344
Q339B	13724.000	0.02053	0.69850	<	0.00300
Q339C	10783.000	0.02254	0.73568	<	0.00334
		0.02126 AVG	0.70790 AVG		0.00000 AVG
		0.001113 SD	0.024468 SD		0.000000 SD
		5.232042 %RSD	3.456361 %RSD		0.000000 %RSD
Q340A	9980.000	0.00555	0.58908		0.00836
Q340B	13486.000	0.00583	0.60746		0.00756
Q340C	10947.000	0.00512	0.65215		0.00867
		0.00550 AVG	0.61623 AVG		0.00820 AVG
		0.000359 SD	0.032433 SD		0.000570 SD
		6.521052 %RSD	5.263103 %RSD		6.948972 %RSD
Q358A	11667.000	0.01804	0.47702	<	0.00376
Q358B	11868.000	0.01720	0.48776	<	0.00396
Q358C	13447.000	0.02080	0.51957	<	0.00372
		0.01868 AVG	0.49478 AVG		0.00000 AVG
		0.001886 SD	0.022130 SD		0.000000 SD
		10.097567 %RSD	4.472705 %RSD		0.000000 %RSD
Q359A	12453.000	0.02039	0.49513		0.00337

Q359B	12274.000	0.02205	0.51150 <	0.00313	
Q359C	12112.000	0.02425	0.53639	0.00971	
		0.02223 AVG	0.51434 AVG	0.00649 AVG	
		0.001933 SD	0.020778 SD	0.005659 SD	
		8.695369 %RSD	4.039793 %RSD	87.169189 %RSD	
Q360A	10138.000	0.01623	0.52678	0.00631	
Q360B	12238.000	0.01767	0.54982 <	0.00361	
Q360C	9200.000	0.01814	0.56321 <	0.00411	
		0.01735 AVG	0.54660 AVG	0.00631 AVG	
		0.000994 SD	0.018425 SD	0.000000 SD	
		5.729957 %RSD	3.370902 %RSD	0.000000 %RSD	
Q361A	12504.000	0.02216	0.50343 <	0.00433	
Q361B	9414.000	0.02268	0.53668 <	0.00540	
Q361C	12549.000	0.02290	0.54810 <	0.00433	
		0.02258 AVG	0.52940 AVG	0.00000 AVG	
		0.000380 SD	0.023204 SD	0.000000 SD	
		1.681906 %RSD	4.382967 %RSD	0.000000 %RSD	
Q362A	11345.000	0.05615	0.64851 <	0.00439	
Q362B	14529.000	0.05612	0.60751 <	0.00346	
Q362C	13393.000	0.06885	0.75074 <	0.00332	
		0.06037 AVG	0.66892 AVG	0.00000 AVG	
		0.007338 SD	0.073768 SD	0.000000 SD	
		12.154815 %RSD	11.027933 %RSD	0.000000 %RSD	
A/S-1A	11458.000 <	0.00466	2.26507	0.02806	
A/S-1B	10540.000	0.00885	2.48126	0.02814	
A/S-1C	10886.000 <	0.00509	2.49205	0.02716	
		0.00885 AVG	2.41279 AVG	0.02778 AVG	
		0.000000 SD	0.128046 SD	0.000544 SD	
		0.000000 %RSD	5.306970 %RSD	1.956894 %RSD	
A/S-2A	9714.000	0.00848	2.26379	0.02550	
A/S-2B	8796.000	0.00743	2.34981	0.02706	
A/S-2C	12566.000	0.01006	2.56189	0.02844	
		0.00865 AVG	2.39183 AVG	0.02700 AVG	
		0.001325 SD	0.153425 SD	0.001476 SD	
		15.313599 %RSD	6.414536 %RSD	5.465885 %RSD	
A/S-3A	11987.000 <	0.00453	2.18003	0.02769	
A/S-3B	13270.000	0.00948	2.48674	0.02974	
A/S-3C	11676.000	0.01288	2.69804	0.02659	
		0.01118 AVG	2.45494 AVG	0.02801 AVG	
		0.007076 SD	0.260464 SD	0.001599 SD	
		63.296913 %RSD	10.609793 %RSD	5.708892 %RSD	
A/S-4A	13736.000 <	0.00441	2.27135	0.04287	
A/S-4B	11244.000 <	0.00518	2.52260	0.04424	
A/S-4C	12130.000	0.00539	2.61176	0.05153	

```
                              0. 00539 AVG      2. 46857 AVG      0. 04621 AVG
                              0. 000000 SD      0. 176518 SD      0. 004657 SD
                              0. 000000 %RSD    7. 15  11 %RSD    10. 078029 %RSD

   A/S-5A    11543. 000    <  0. 00481          2. 25753          0. 04375
   A/S-5B    12023. 000    <  0. 00276          2. 34240          0. 03723
   A/S-5C    10971. 000    <  0. 00532          2. 52123          0. 04572

                              0. 00000 AVG      2. 37372 AVG      0. 04224 AVG
                              0. 000000 SD      0. 134607 SD      0. 004445 SD
                              0. 000000 %RSD    5. 670715 %RSD    10. 523463 %RSD

   A/S-6A    15409. 000    <  0. 00244          2. 26330          0. 04069
   A/S-6B    11218. 000       0. 00636          2. 37409          0. 03547
   A/S-6C    12582. 000       0. 00763          2. 42634          0. 03955

                              0. 00700 AVG      2. 35458 AVG      0. 03857 AVG
                              0. 004641 SD      0. 083253 SD      0. 002744 SD
                             66. 339767 %RSD    3. 535805 %RSD    7. 115449 %RSD

   A/S-7A    12640. 000    <  0. 00283          2. 34615          0. 03422
   A/S-7B    13536. 000    <  0. 00472          2. 39929          0. 04423
   A/S-7C    11884. 000       0. 00655          2. 63792          0. 04715

                              0. 00655 AVG      2. 46112 AVG      0. 04187 AVG
                              0. 000000 SD      0. 155403 SD      0. 006781 SD
                              0. 000000 %RSD    6. 314322 %RSD    16. 197462 %RSD

   S626A      9670. 000       0. 07638          0. 70513       <  0. 00502
   S626B      8226. 000       0. 07648          0. 70766       <  0. 00616
   S626C      8418. 000       0. 08562          0. 78130       <  0. 00876

                              0. 07949 AVG      0. 73136 AVG      0. 00000 AVG
                              0. 005311 SD      0. 043263 SD      0. 000000 SD
                              6. 680752 %RSD    5. 915433 %RSD    0. 000000 %RSD

   S604A      8455. 000       0. 00667          1. 70441          0. 09011
   S604B      7462. 000    <  0. 00589          1. 82703          0. 09857
   S604C      8039. 000    <  0. 00605          1. 97603          0. 11232

                              0. 00667 AVG      1. 83582 AVG      0. 10033 AVG
                              0. 000000 SD      0. 136023 SD      0. 011212 SD
                              0. 000000 %RSD    7. 409386 %RSD    11. 174778 %RSD
```

(TI)TITLE:
  91.119065 RF LEAD
(LN)LIBRARY: .
(SA)SAMPLE TIME: 7JAN80   11.53:00
(SE)STD ENERGY TOLERANCE: 2.00
(UE)UNK ENERGY TOLERANCE: 2.00
(TF)THERMAL FLUX: 0.0000E-01
(EF)EPITHERMAL FLUX: 0.0000E-01
(FF)FAST FLUX: 0.0000E-01
(QU)UNITS: UG

	ELEMENT	ENERGY	HALF-LIFE		SEC:	
1	%-COPPER	511.00	1.2800E 01	H	4.6080E	04
2	%-ANTIMONY	564.09	2.7200E 00	D	2.3501E	05
3	%-ARSENIC	657.41	2.6300E 01	H	9.4680E	04

STANDARD SAMPLES

	NAME	MASS	FILE	POWER	ACT TIME
1	S626A	9670.00	FBI1 .A01	100.0	100000.0
2	S626B	8226.00	FBI1 .A02	100.0	100000.0
3	S626C	8418.00	FBI1 .A03	100.0	100000.0
4	S604A	8455.00	FBI1 .A04	100.0	100000.0
5	S604B	7462.00	FBI1 .A05	100.0	100000.0
6	S604C	8039.00	FBI1 .A06	100.0	100000.0

STD: 1 S626A   FILE= FBI1 .A01

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	7.8000E-02	0.0000E-01
2	%-ANTIMONY	564.09	7.2000E-01	0.0000E-01
3	%-ARSENIC	657.41	0.0000E-01	0.0000E-01

STD: 2 S626B   FILE= FBI1 .A02

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	7.8000E-02	0.0000E-01
2	%-ANTIMONY	564.09	7.2000E-01	0.0000E-01
3	%-ARSENIC	657.41	0.0000E-01	0.0000E-01

STD: 3 S626C   FILE= FBI1 .A03

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	7.8000E-02	0.0000E-01
2	%-ANTIMONY	564.09	7.2000E-01	0.0000E-01
3	%-ARSENIC	657.41	0.0000E-01	0.0000E-01

STD: 4 S604A   FILE= FBI1 .A04

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	0.0000E-01	0.0000E-01
2	%-ANTIMONY	564.09	0.0000E-01	0.0000E-01
3	%-ARSENIC	657.41	1.0000E-01	0.0000E-01

STD: 5 S604B   FILE= FBI1 .A05

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	0.0000E-01	0.0000E-01
2	%-ANTIMONY	564.09	0.0000E-01	0.0000E-01
3	%-ARSENIC	657.41	1.0000E-01	0.0000E-01

STD: 6 S604C   FILE= FB11 .A06

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	0.0000E-01	0.0000E-01
2	%-ANTIMONY	564.09	0.0000E-01	0.0000E-01
3	%-ARSENIC	657.41	1.0000E-01	0.0000E-01

UNKNOWN SAMPLES

	NAME	MASS	FILE	POWER	ACT TIME
1	Q328A	17029.00	FBI1 .A07	100.0	100000.0
2	Q228B	12277.00	FBI1 .A08	100.0	100000.0
3	Q328C	11861.00	FB11 .A09	100.0	100000.0
4	Q329A	11684.00	FBI1 .A10	100.0	100000.0
5	Q329B	13842.00	FB11 .A11	100.0	100000.0
6	Q329C	11563.00	FBI1 .A12	100.0	100000.0
7	Q330A	12210.00	FBI1 .A13	100.0	100000.0
8	Q330B	10673.00	FBI1 .A14	100.0	100000.0
9	Q330C	13097.00	FB11 .A15	100.0	100000.0
10	Q331A	8011.00	FBI1 .A16	100.0	100000.0
11	Q331B	9696.00	FBI1 .A17	100.0	100000.0
12	Q331C	10386.00	FBI1 .A18	100.0	100000.0
13	Q332A	11093.00	FBI1 .A19	100.0	100000.0
14	Q332B	12522.00	FBI1 .A20	100.0	100000.0
15	Q332C	9862.00	FBI1 .A21	100.0	100000.0
16	Q333A	12598.00	FBI1 .A22	100.0	100000.0
17	Q333B	11767.00	FBI1 .A23	100.0	100000.0
18	Q333C	11840.00	FBI1 .A24	100.0	100000.0
19	Q334A	9873.00	FBI1 .A25	100.0	100000.0
20	Q334B	11470.00	FB11 .A26	100.0	100000.0
21	Q334C	13249.00	FBI1 .A27	100.0	100000.0
22	Q335A	11855.00	FBI1 .A28	100.0	100000.0
23	Q335B	14080.00	FBI1 .A29	100.0	100000.0
24	Q335C	9464.00	FBI1 .A30	100.0	100000.0
25	Q336A	8158.00	FBI1 .A31	100.0	100000.0
26	Q336B	10453.00	FBI1 .A32	100.0	100000.0
27	Q336C	11304.00	FBI1 .A33	100.0	100000.0
28	Q337A	9607.00	FBI1 .A34	100.0	100000.0
29	Q337B	10572.00	FBI1 .A35	100.0	100000.0
30	Q337C	9809.00	FBI1 .A36	100.0	100000.0
31	Q338A	11368.00	FBI1 .A37	100.0	100000.0
32	Q338B	11406.00	FBI1 .A38	100.0	100000.0
33	Q338C	14742.00	FBI1 .A39	100.0	100000.0
34	Q339A	9328.00	FBI1 .A40	100.0	100000.0
35	Q339B	13724.00	FBI1 .A41	100.0	100000.0
36	Q339C	10783.00	FBI1 .A42	100.0	100000.0
37	Q340A	9980.00	FBI1 .A43	100.0	100000.0
38	Q340B	13486.00	FBI1 .A44	100.0	100000.0
39	Q340C	10947.00	FBI1 .A45	100.0	100000.0
40	Q358A	11667.00	FBI1 .A46	100.0	100000.0
41	Q358B	11868.00	FBI1 .A47	100.0	100000.0
42	Q358C	13447.00	FBI1 .A48	100.0	100000.0
43	Q359A	12453.00	FB11 .A49	100.0	100000.0
44	Q359B	12274.00	FBI1 .A50	100.0	100000.0
45	Q359C	12112.00	FBI1 .A51	100.0	100000.0
46	Q360A	10138.00	FBI1 .A52	100.0	100000.0
47	Q360B	12238.00	FB11 .A53	100.0	100000.0
48	Q360C	9200.00	FB11 .A54	100.0	100000.0

49	Q361A	12504.00	FBI1	.A55	100.0	100000.0
50	Q361B	9414.00	FBI1	.A56	100.0	100000.0
51	Q361C	1149.00	FBI1	.A57	100.0	100000.0
52	Q362A	11345.00	FBI1	.A58	100.0	100000.0
53	Q362B	14529.00	FBI1	.A59	100.0	100000.0
54	Q362C	13393.00	FBI1	.A60	100.0	100000.0
55	A/S-1A	11458.00	FBI1	.A61	100.0	100000.0
56	A/S-1B	10540.00	FBI1	.A62	100.0	100000.0
57	A/S-1C	10886.00	FBI1	.A63	100.0	100000.0
58	A/S-2A	9714.00	FBI1	.A64	100.0	100000.0
59	A/S-2B	8796.00	FBI1	.A65	100.0	100000.0
60	A/S-2C	12566.00	FBI1	.A66	100.0	100000.0
61	A/S-3A	11987.00	FBI1	.A67	100.0	100000.0
62	A/S-3B	13270.00	FBI1	.A68	100.0	100000.0
63	A/S-3C	11676.00	FBI1	.A69	100.0	100000.0
64	A/S-4A	13736.00	FBI1	.A70	100.0	100000.0
65	A/S-4B	11244.00	FBI1	.A71	100.0	100000.0
66	A/S-4C	12130.00	FBI1	.A72	100.0	100000.0
67	A/S-5A	11543.00	FBI1	.A73	100.0	100000.0
68	A/S-5B	12023.00	FBI1	.A74	100.0	100000.0
69	A/S-5C	10971.00	FBI1	.A75	100.0	100000.0
70	A/S-6A	15409.00	FBI1	.A76	100.0	100000.0
71	A/S-6B	11218.00	FBI1	.A77	100.0	100000.0
72	A/S-6C	12582.00	FBI1	.A78	100.0	100000.0
73	A/S-7A	12640.00	FBI1	.A79	100.0	100000.0
74	A/S-7B	13536.00	FBI1	.A80	100.0	100000.0
75	A/S-7C	11884.00	FBI1	.A81	100.0	100000.0
76	S626A	9670.00	FBI1	.A01	100.0	100000.0
77	S626B	8226.00	FBI1	.A02	100.0	100000.0
78	S626C	8418.00	FBI1	.A03	100.0	100000.0
79	S604A	8455.00	FBI1	.A04	100.0	100000.0
80	S604B	7462.00	FBI1	.A05	100.0	100000.0
81	S604C	8039.00	FBI1	.A06	100.0	100000.0

```
***************************************************************
*******************   8 ●N 1980  4:44:26 PM   *****●***********
***************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   5626A
TYPE OF SAMPLE:   STANDARD
SAMPLE QUANTITY:    9670.000        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
***************************************************************
                                  *
ACQUISITION DATE:  8JAN80 1545:57 * FWHM(1332)        2.390
PRESET TIME(LIVE):     600. SEC   * SENSITIVITY:      5.000
ELAPSED REAL TIME:     610. SEC   * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:     600. SEC   * NBR ITERATIONS:   10.
                                  *
***************************************************************
                                  *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                  *
***************************************************************


          ENERGY WINDOW    499.787 TO    674.920

 PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR    FIT

  1  1  511.04    4113.    1837.   2.82  1022.48 1012  22 6.855E 00  2.1 1.32E 00
  2  1  564.22   71035.    2508.   1.95  1128.76 1120  19 1.184E 02  0.4 6.89E 01
  3  1  602.83    2494.     330.   2.05  1205.92 1197  20 4.156E 00  2.3 1.26E 00
  4  1  646.14     164.     199.   2.09  1292.49 1286  15 2.730E-01 14.5 6.24E-04


     PEAK SEARCH COMPLETED




STANDARD REPORT:

ELEMENT        ENERGY   AREA    CONCENTR.     ERROR     CONSTANT      ERROR
                                            (1 SIGMA)              (1 SIGMA)
%-COPPER        511.0   4113.  7.8000E-02 0.0000E-01 4.1312E-02 8.8635E-04
%-ANTIMONY      564.1  71035.  7.2000E-01 0.0000E-01 2.2882E-02 8.8835E-05
%-ARSENIC       657.4      0.  0.0000E-01 0.0000E-01 0.0000E-01 0.0000E-01
```

```
91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  S626B
TYPE OF SAMPLE:  STANDARD
SAMPLE QUANTITY:   8226.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************
                              *
ACQUISITION DATE:  8JAN80 1556:19 * FWHM(1332)       2.390
PRESET TIME(LIVE):      300. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:      531. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      524. SEC  * NBR ITERATIONS:   10.
                              *
************************************************************
                              *
DETECTOR: GELI-8              * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:       0.5003803     * HALF LIFE RATIO:    8.00
OFFSET:        -0.5932283 KEV * ABUNDANCE LIMIT:   85.00%
                              *
************************************************************
```

```
             ENERGY WINDOW    499.787 TO    674.920
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR	FIT
1	1	511.03	3033.	1354.	2.91	1022.48	1012	21	5.788E 00	2.5	1.28E 00
2	1	564.21	52872.	1692.	1.94	1128.74	1120	18	1.009E 02	0.4	5.45E 01
3	1	602.84	1868.	259.	2.05	1205.95	1195	23	3.566E 00	2.6	4.73E 00
4	1	638.53	68.	165.	2.65	1277.27	1272	14	1.306E-01	29.1	4.26E 00
5	1	645.88	105.	365.	2.13	1291.96	1287	27	2.012E-01	27.4	3.31E 00

```
      PEAK SEARCH COMPLETED
```

```
STANDARD REPORT:
```

ELEMENT	ENERGY	AREA	CONCENTR.	ERROR (1 SIGMA)	CONSTANT	ERROR (1 SIGMA)
%-COPPER	511.0	3033.	7.8000E-02	0.0000E-01	4.1365E-02	1.0335E-03
%-ANTIMONY	564.1	52872.	7.2000E-01	0.0000E-01	2.2965E-02	1.0302E-04
%-ARSENIC	657.4	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01

```
******************************************************************
***************** 8 ●N 1980  4:46:34 PM  *****●************
******************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  S626C
TYPE OF SAMPLE:  STANDARD
SAMPLE QUANTITY:   8418.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************
                                *
ACQUISITION DATE:  8JAN80 1605:25 * FWHM(1332)      2.390
PRESET TIME(LIVE):       300. SEC * SENSITIVITY:    5.000
ELAPSED REAL TIME:       305. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       300. SEC * NBR ITERATIONS:  10.
                                *
************************************************************
                                *
DETECTOR: GELI-8              * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803    * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV * ABUNDANCE LIMIT:  85.00%
                                *
************************************************************


        ENERGY WINDOW     499.787 TO     674.920

 PK IT  ENERGY      AREA      BKGND    FWHM   CHANNEL LEFT FW   CTS/SEC    %ERR     FIT

  1  1  511.02     1977.     1001.    3.05   1022.46 1011   23 6.589E 00   3.2 1.44E 00
  2  1  564.20    34156.     1175.    1.97   1128.73 1120   18 1.139E 02   0.6 3.55E 01
  3  1  602.86     1186.      236.    1.94   1205.99 1196   27 3.953E 00   3.4 2.24E 00
  4  1  645.69       76.      145.    2.55   1291.59 1281   20 2.527E-01  25.2 1.38E 00


    PEAK SEARCH COMPLETED




STANDARD REPORT:

ELEMENT        ENERGY    AREA     CONCENTR.      ERROR      CONSTANT       ERROR
                                               (1 SIGMA)                (1 SIGMA)
%-COPPER        511.0    1977.   7.8000E-02 0.0000E-01 4.6314E-02 1.4778E-03
%-ANTIMONY      564.1   34156.   7.2000E-01 0.0000E-01 2.5354E-02 1.4183E-04
%-ARSENIC       657.4       0.   0.0000E-01 0.0000E-01 0.0000E-01 0.0000E-01
```

9111.9065 RF LEAD

```
SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   S604A
TYPE OF SAMPLE:   STANDARD
SAMPLE QUANTITY:   8455.000        UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*****************************************************************
                                         *
ACQUISITION DATE:   8JAN80 1610:44  * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC   * SENSITIVITY:      5.000
ELAPSED REAL TIME:       620. SEC   * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC   * NBR ITERATIONS:   10.
                                    *
*****************************************************************
                                    *
DETECTOR: GEL1-8                    * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06  * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:       0.5003803           * HALF LIFE RATIO:    8.00
OFFSET:        -0.5932283 KEV       * ABUNDANCE LIMIT:   85.00%
                                    *
*****************************************************************
```

ENERGY WINDOW   499.787 TO   674.920

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR	FIT
1	1	511.64	307.	2373.	2.49	1023.69	1017	12	5.118E-01	23.1	2.03E 00
2	3	559.32	12062.	1428.	2.40	1118.97	1107	35	2.010E 01	1.0	7.01E 01
3	3	564.20	149470.	895.	1.97	1128.72	1107	35	2.491E 02	0.3	
4	1	602.86	5139.	971.	2.03	1205.99	1194	21	8.566E 00	1.6	4.65E 00
5	1	646.08	351.	546.	1.80	1292.37	1286	14	5.852E-01	10.8	1.26E 00
6	1	657.19	1037.	695.	2.11	1314.57	1303	20	1.728E 00	4.8	1.64E 00

PEAK SEARCH COMPLETED

STANDARD REPORT:

ELEMENT	ENERGY	AREA	CONCENTR.	ERROR (1 SIGMA)	CONSTANT	ERROR (1 SIGMA)
%-COPPER	511.0	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
%-ANTIMONY	564.1	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
%-ARSENIC	657.4	1037.	1.0000E-01	0.0000E-01	4.3173E-03	2.0513E-04

```
**********************************************************************
******************    8 ▓█ 4 1980   4:48:39 PM   *****▓█***********
**********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  S604B
TYPE OF SAMPLE:  STANDARD
SAMPLE QUANTITY:    7462.000        UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
**********************************************************************
                                       *
ACQUISITION DATE:   8JAN80 1621:18 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:       619. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC  * NBR ITERATIONS:   10.
                                       *
**********************************************************************
                                       *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803          * HALF LIFE RATIO:    8.00
OFFSET:        -0.5932283 KEV       * ABUNDANCE LIMIT:   85.00%
                                       *
**********************************************************************


          ENERGY WINDOW    499.787 TO    674.920

 PK IT  ENERGY     AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR     FIT

  1  3  559.33    10887.    1514.   2.40  1119.00 1109  29 1.814E 01  1.1 8.94E 04
  2  3  564.20   141143.    882.    1.99  1128.72 1109  29 2.352E 02  0.3
  3  1  602.88     4694.    803.    1.99  1206.03 1197  19 7.824E 00  1.7 3.62E 00
  4  1  646.03      259.    560.    1.91  1292.27 1285  14 4.318E-01 14.3 1.11E 00
  5  1  657.12      996.    516.    1.99  1314.42 1307  16 1.660E 00  4.5 1.21E 00


     PEAK SEARCH COMPLETED




STANDARD REPORT:

ELEMENT        ENERGY   AREA    CONCENTR.     ERROR     CONSTANT      ERROR
                                            (1 SIGMA)              (1 SIGMA)
%-COPPER       511.0      0.   0.0000E-01 0.0000E-01 0.0000E-01 0.0000E-01
%-ANTIMONY     564.1      0.   0.0000E-01 0.0000E-01 0.0000E-01 0.0000E-01
%-ARSENIC      657.4    996.   1.0000E-01 0.0000E-01 4.7223E-03 2.1348E-04
```

91119065 RF LEAD

```
SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  S604C
TYPE OF SAMPLE:  STANDARD
SAMPLE QUANTITY:    8039.000       UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
********************************************************
                                 *
ACQUISITION DATE:  8JAN80 1631:47 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      623. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                 *
********************************************************
                                 *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                 *
********************************************************
```

         ENERGY WINDOW   499.787 TO   674.920

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR	FIT
1	3	559.33	13441.	1726.	2.42	1119.00	1108	34	2.240E 01	1.0	8.00E 04
2	3	564.19	164151.	1067.	1.99	1128.71	1108	34	2.736E 02	0.2	
3	1	602.88	5614.	1021.	1.97	1206.04	1196	19	9.356E 00	1.6	5.37E 00
4	1	645.97	329.	808.	1.94	1292.15	1286	17	5.476E-01	13.4	1.88E 00
5	1	657.28	1217.	575.	2.23	1314.74	1305	19	2.029E 00	4.0	1.85E 00

    PEAK SEARCH COMPLETED

STANDARD REPORT:

ELEMENT	ENERGY	AREA	CONCENTR.	ERROR (1 SIGMA)	CONSTANT	ERROR (1 SIGMA)
%-COPPER	511.0	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
%-ANTIMONY	564.1	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
%-ARSENIC	657.4	1217.	1.0000E-01	0.0000E-01	5.3816E-03	2.1505E-04

SUMMARY OF STANDARD CONSTANTS:

1. ELEMENT %-COPPER   AT   511.00 KEV

STANDARD NAME	CONCENTR.	CONSTANT	ERROR (1 SIGMA)
S626A	7.8000E-02	4.1312E-02	8.8635E-04
S626B	7.8000E-02	4.1365E-02	1.0335E-03
S626C	7.8000E-02	4.6314E-02	1.4778E-03
MEAN CONSTANT, 3 STDS:		4.2189E-02	6.1233E-04

2. ELEMENT %-ANTIMONY   AT   564.09 KEV

STANDARD NAME	CONCENTR.	CONSTANT	ERROR (1 SIGMA)
S626A	7.2000E-01	2.2882E-02	8.8835E-05
S626B	7.2000E-01	2.2965E-02	1.0302E-04
S626C	7.2000E-01	2.5354E-02	1.4183E-04
MEAN CONSTANT, 3 STDS:		2.3365E-02	6.0784E-05

3. ELEMENT %-ARSENIC   AT   657.41 KEV

STANDARD NAME	CONCENTR.	CONSTANT	ERROR (1 SIGMA)
S604A	1.0000E-01	4.3173E-03	2.0513E-04
S604B	1.0000E-01	4.7223E-03	2.1348E-04
S604C	1.0000E-01	5.3816E-03	2.1505E-04
MEAN CONSTANT, 3 STDS:		4.7911E-03	1.2187E-04

```
*********************************************************************
*****************  8 JAN 1980  4:51:04 PM  **********************
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q328A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   17029.00         UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*********************************************************************
                                    *
ACQUISITION DATE:   7JAN80 1519:58 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        674. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                    *
*********************************************************************
                                    *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803       * HALF LIFE RATIO:    8.00
OFFSET:           -0.5932283 KEV   * ABUNDANCE LIMIT:    85.00%
                                    *
*********************************************************************


UNKNOWN SAMPLE REPORT


                    PEAK                                  1 SIGMA
ELEMENT           ENERGY    BKGND      AREA      CONCENTR.   ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER          511.0    13922.     10183.     0.0286    0.0007      2.4
%-ANTIMONY        564.1    20874.    556234.     2.4193    0.0071      0.3
%-ARSENIC         657.4     2558.        0. <    0.0053    NOT DETECTABLE

 1009:  752.    795.    762.    801.    771.    798.    758.    807.    985.
 1018: 1046.   1442.   1752.   2084.   2442.   2388.   2091.   1637.   1277.
 1027:  955.    869.    730.    740.    720.    691.    671.    663.    662.

 1117: 1100.   1163.   1263.   1424.   1647.   2067.   3063.   6365.  17756.
 1126:44274.  85353. 123041. 131533.  94777.  44600.  13128.   3186.   1378.
 1135:  975.    901.    813.    777.    707.    625.    666.    610.    626.

 1301:  233.    235.    195.    187.    207.    191.    191.    169.    222.
 1310:  179.    201.    207.    209.    178.    193.    200.    194.    182.
 1319:  209.    200.    184.    176.    187.    193.    185.    168.    181.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =   1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

 1  1  511.00    10183.    13922.    2.85  1022.40 1014   19 1.697E 01   1.9
 2  1  564.12   556234.    20874.    1.98  1128.56 1117   24 9.271E 02   0.1
 3  1  602.77    14560.     4990.    1.99  1205.81 1197   17 2.427E 01   1.1
 4  1  645.97     1020.     2753.    2.01  1292.14 1286   13 1.700E 00   7.9
```

```
*****************************************************************
****************** 8 ●  1980  4:52:09 PM  *****●************
*****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q228B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    12277.00          UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*****************************************************************
                                 *
ACQUISITION DATE:  7JAN80 1531:26 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        658. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                 *
*****************************************************************
                                 *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                 *
*****************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                              1 SIGMA
ELEMENT          ENERGY    BKGND     AREA    CONCENTR.   ERROR     %ERROR
------------------------------------------------------------------------

%-COPPER         511.0    10233.    8067.     0.0318    0.0008       2.5
%-ANTIMONY       564.1    14938.  442364.     2.6741    0.0081       0.3
%-ARSENIC        657.4     1703.       0. <   0.0061    NOT DETECTABLE

 1009:   581.    606.    659.    583.    609.    574.    622.    668.    733.
 1018:   866.   1164.   1335.   1682.   1870.   1824.   1646.   1258.    991.
 1027:   740.    646.    599.    557.    533.    558.    577.    505.    546.

 1117:   927.    892.   1071.   1109.   1263.   1594.   2283.   4926.  13572.
 1126:34338.  67154.  98524. 104706.  76826.  35610.  10409.   2282.    888.
 1135:   660.    607.    526.    482.    440.    457.    411.    442.    395.

 1301:   168.    154.    134.    128.    145.    139.    134.    152.    141.
 1310:   145.    138.    130.    126.    127.    115.    134.    134.    147.
 1319:   138.    113.    115.    117.    139.    142.    142.    141.    109.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT   ENERGY     AREA     BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1   510.97     8067.    10233.   2.93   1022.34 1014   18 1.345E 01   2.1
  2  1   564.13   442364.    14938.   1.97   1128.58 1118   22 7.373E 02   0.2
  3  1   602.77    11583.     3553.   1.99   1205.81 1196   19 1.930E 01   1.2
  4  1   645.96      832.     1782.   2.15   1292.13 1286   12 1.387E 00   8.0
```

```
********************************************************************
****************** 8 ●N 1980   4:53:14 PM   *****●***********
********************************************************************

911.19065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q328C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   11861.00          UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*************************************************************
                                    *
ACQUISITION DATE:   7JAN80 1542:37 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        658. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                    *
*************************************************************
                                    *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                    *
*************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	11482.	8269.	0.0340	0.0009	2.6
%-ANTIMONY	564.1	14516.	448107.	2.8094	0.0085	0.3
%-ARSENIC	657.4	1736.	0. <	0.0064	NOT DETECTABLE	

```
1009:  668.   623.   547.   589.   589.   611.   593.   691.   755.
1018:  864.  1035.  1370.  1681.  1848.  1830.  1672.  1349.   986.
1027:  785.   642.   569.   562.   560.   517.   528.   481.   482.

1117:  908.   909.  1066.  1115.  1334.  1646.  2430.  5112. 13981.
1126:35313. 69052. 99720.1.06229. 76504. 35810. 10071.  2251.   891.
1135:  649.   576.   527.   519.   472.   458.   407.   435.   394.

1301:  156.   134.   130.   133.   139.   134.   142.   115.   133.
1310:  134.   135.   142.   148.   133.   137.   141.   117.   122.
1319:  142.   124.   128.   105.   112.   133.   118.   112.   128.
        PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.03	8269.	11482.	2.93	1022.48	1013	21	1.378E 01	2.1
2	1	564.12	448107.	14516.	1.97	1128.56	1117	21	7.468E 02	0.2
3	1	602.77	11790.	3905.	2.00	1205.81	1195	19	1.965E 01	1.2
4	1	645.85	892.	2401.	2.19	1291.90	1284	17	1.487E 00	8.5

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q329A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   11684.00          UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
***************************************************************
                               *
ACQUISITION DATE:  7JAN80 1553:47 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        608. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                               *
***************************************************************
                               *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803      * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV  * ABUNDANCE LIMIT:  85.00%
                               *
***************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	1465.	2921.	0.0123	0.0004	3.0
%-ANTIMONY	564.2	1916.	51311.	0.3272	0.0017	0.5
%-ARSENIC	657.4	243.	0. <	0.0025	NOT DETECTABLE	

```
 1009:    78.    63.    77.    81.    78.    86.    64.   102.   118.
 1018:   164.   269.   329.   474.   508.   521.   434.   367.   249.
 1027:   163.   123.    92.    61.    76.    73.    61.    65.    74.

 1117:   123.   145.   162.   148.   163.   206.   268.   509.  1455.
 1126:  3797.  7427. 11241. 12446.  9312.  4375.  1255.   247.    59.
 1135:    30.    27.    28.    18.    19.    27.    28.    35.    31.

 1301:    19.    19.    21.    25.    21.    19.    19.    16.    19.
 1310:    21.    20.    20.    20.    29.    15.    24.    15.    13.
 1319:    14.    11.    22.    15.    21.    18.    22.    17.    21.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.04	2921.	1465.	3.07	1022.49	1013	20	4.868E 00	2.6
2	1	564.17	51311.	1916.	1.95	1128.66	1120	21	8.552E 01	0.5
3	1	602.84	1433.	344.	1.93	1205.94	1199	16	2.389E 00	3.2

```
*************************************************************************
******************* 8 ●N 1980  4:55:20 PM  ****●*************
*************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q329B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   13842.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************************
                                 *
ACQUISITION DATE:  7JAN80 1604:10 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       609. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                 *
*************************************************************************
                                 *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                 *
*************************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                               1 SIGMA
ELEMENT          ENERGY    BKGND      AREA      CONCENTR.   ERROR      %ERROR
-------------------------------------------------------------------------------

%-COPPER         511.1     1898.      3790.      0.0136     0.0004       2.7
%-ANTIMONY       564.2     2025.     63972.      0.3450     0.0017       0.5
%-ARSENIC        657.4      296.        0. <     0.0023     NOT DETECTABLE

 1009:   77.     95.      80.    104.     99.     85.     91.    122.    151.
 1018:  227.    312.     438.    609.    681.    670.    607.    465.    315.
 1027:  211.    132.      98.     91.     86.     87.     61.     74.     68.

 1117:  136.    154.     200.    189.    202.    216.    340.    636.  1773.
 1126: 4630.   9359.  14151.  15596. 11615.   5321.   1529.    257.     54.
 1135:   40.     37.      32.     29.     42.     29.     27.     26.     29.

 1301:   22.     26.      22.     18.     27.     19.     18.     11.     11.
 1310:   27.     21.      22.     26.     19.     21.     29.     17.     31.
 1319:   20.     22.      30.     21.     17.     24.     16.     17.     27.
          PULSE-PILE-UP CORRECTED DATA. CORRECTION = 1.000

 PK IT  ENERGY    AREA     BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC   %ERR

  1  1  511.07   3790.    1898.    2.94  1022.56 1013   22 6.316E 00   2.3
  2  1  564.16  63972.    2025.    1.94  1128.66 1120   18 1.066E 02   0.4
  3  1  602.83   1662.     475.    1.91  1205.92 1197   19 2.771E 00   3.1
```

```
***********************************************************************
******************* 8 ●N 1980  4:56:26 PM  *****●***********
***********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q329C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11563.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*******************************************************************
                                 *
ACQUISITION DATE:  7JAN80 1614:32 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      608. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                 *
*******************************************************************
                                 *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                 *
*******************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                  1 SIGMA
ELEMENT         ENERGY    BKGND     AREA    CONCENTR.   ERROR    %ERROR
-----------------------------------------------------------------------

%-COPPER        511.0    2086.    3270.    0.0142    0.0004      3.0
%-ANTIMONY      564.2    1854.   57612.    0.3726    0.0019      0.5
%-ARSENIC       657.4     215.       0. <  0.0024    NOT DETECTABLE

 1009:   86.   80.   72.   82.   88.   96.  101.  108.  156.
 1018:  208.  262.  379.  534.  603.  602.  513.  390.  255.
 1027:  159.  107.   98.   80.   81.   83.   74.   75.   72.

 1117:  132.  156.  167.  182.  181.  205.  292.  560. 1596.
 1126: 4119. 8502. 12720. 14044. 10384. 4905. 1236. 205.   55.
 1135:   34.   26.   33.   30.   30.   31.   15.   22.   21.

 1301:   13.   24.   17.   18.    9.   22.   18.   13.   21.
 1310:   13.   15.   15.   18.   22.   14.   11.   23.   17.
 1319:   19.   15.   12.   18.   14.   22.   24.   12.   20.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

  1  1  511.02    3270.    2086.    2.89  1022.44 1012  27 5.450E 00  2.6
  2  1  564.16   57612.    1854.    1.94  1128.66 1120  18 9.602E 01  0.4
  3  1  602.83    1556.     281.    1.95  1205.93 1199  15 2.593E 00  3.0
  4  1  646.17     193.     242.    4.08  1292.55 1284  17 3.215E-01 13.5
```

91119065 RF LEAD

```
SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q330A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    12210.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************
                              *
ACQUISITION DATE:  7JAN80 1624:54 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      616. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                              *
************************************************************
                              *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                              *
************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	3059.	7109.	0.0295	0.0006	2.2
%-ANTIMONY	564.2	710.	106519.	0.6536	0.0026	0.4
%-ARSENIC	657.2	608.	384.	0.0124	0.0013	10.7

```
 1009:  165.   140.   152.   138.   152.   176.   193.   209.   274.
 1018:  364.   604.   835.  1063.  1245.  1213.  1110.   787.   538.
 1027:  338.   217.   180.   153.   156.   151.   136.   116.   126.

 1117:  731.  1019.  1160.   955.   607.   477.   518.  1014.  2829.
 1126: 7601. 15580. 23397. 25858. 19170.  8943.  2400.   457.   130.
 1135:   79.    66.    61.    48.    74.    53.    40.    52.    59.

 1301:   29.    22.    31.    35.    24.    21.    29.    33.    31.
 1310:   40.    41.    64.    93.   113.   126.    96.    57.    41.
 1319:   30.    31.    31.    26.    36.    20.    27.    29.    22.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.02	7109.	3059.	2.99	1022.46	1012	23	1.185E 01	1.6
2	4	559.41	5428.	1315.	2.70	1119.15	1110	33	9.047E 00	1.7
3	4	564.16	106519.	710.	1.94	1128.65	1110	33	1.775E 02	0.3
4	1	602.78	2776.	984.	2.01	1205.83	1195	24	4.627E 00	2.5
5	1	646.08	255.	303.	2.56	1292.37	1287	11	4.257E-01	11.5
6	1	657.18	384.	608.	1.95	1314.54	1304	19	6.402E-01	10.4

```
9111.9065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q330B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    10673.00         UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
**********************************************************************
                               *
ACQUISITION DATE:  7JAN80 1635:24 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      613. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:    10.
                               *
**********************************************************************
                               *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:       -0.5932283 KEV       * ABUNDANCE LIMIT:  85.00%
                               *
**********************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	2740.	6433.	0.0309	0.0007	2.2
%-ANTIMONY	564.2	569.	95989.	0.6750	0.0028	0.4
%-ARSENIC	657.1	388.	395.	0.0146	0.0013	9.0

```
 1009:   142.   143.   155.   126.   145.   153.   163.   202.   232.
 1018:   347.   509.   799.  1006.  1115.  1128.  1006.   761.   459.
 1027:   297.   193.   147.   136.   141.   117.   124.   107.   142.

 1117:   659.   930.  1008.   813.   573.   428.   509.   962.  2653.
 1126:  6864. 13999. 21217. 23208. 17266.  7967.  2181.   379.    88.
 1135:    71.    54.    48.    47.    47.    50.    50.    52.    52.

 1301:    26.    22.    19.    25.    32.    22.    21.    26.    25.
 1310:    28.    25.    61.    88.    94.   131.    76.    45.    26.
 1319:    23.    25.    21.    19.    31.    19.    22.    29.    21.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.02	6433.	2740.	2.94	1022.45	1012	21	1.072E 01	1.7
2	5	559.41	5200.	1116.	2.94	1119.15	1107	35	8.667E 00	1.7
3	5	564.16	95989.	569.	1.94	1128.65	1107	35	1.600E 02	0.3
4	1	602.82	2561.	528.	1.91	1205.91	1197	16	4.268E 00	2.3
5	1	657.14	395.	388.	1.94	1314.46	1308	16	6.591E-01	8.7

```
***********************************************************************
******************   8 JAN 1980   4:59:54 PM   ***********************
***********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q330C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    13097.00        UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                                  *
ACQUISITION DATE:  7JAN80 1645:50 * FWHM(1332)          2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:       618. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                  *
***********************************************************************
                                  *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                  *
***********************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                              1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER         511.0     3399.     8390.     0.0331     0.0007      2.1
%-ANTIMONY       564.1      772.   125269.     0.7192     0.0028      0.4
%-ARSENIC        657.2     1560.      461.     0.0140     0.0018     13.2

  1009:   197.   189.   174.   174.   179.   180.   224.   230.   333.
  1018:   471.   651.   991.  1334.  1526.  1476.  1314.   953.   608.
  1027:   390.   271.   218.   184.   172.   140.   133.   137.   143.

  1117:   834.  1188.  1278.  1094.   741.   568.   640.  1309.  3532.
  1126:  9195. 18509. 27787. 30203. 22207. 10174.  2756.   511.   129.
  1135:    88.    74.    71.    80.    71.    89.    65.    50.    72.

  1301:    44.    41.    44.    31.    47.    38.    32.    26.    38.
  1310:    31.    55.    81.   105.   136.   148.   113.    82.    47.
  1319:    44.    31.    37.    40.    33.    21.    30.    29.    33.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL. LEFT PW   CTS/SEC    %ERR

  1  1. 511.02    8390.     3399.    2.84  1022.45 1012   22 1.398E 01   1.5
  2  5  559.42    6509.     1418.    2.87  1119.17 1107   32 1.085E 01   1.5
  3  5  564.15  125269.      772.    1.94  1128.62 1107   32 2.088E 02   0.3
  4  1  602.79    3304.      596.    1.95  1205.84 1198   15 5.507E 00   2.0
  5  1  645.80     316.      504.    2.69  1291.80 1284   16 5.260E-01  11.5
  6  1  657.21     461.     1560.    2.08  1314.60 1303   40 7.684E-01  13.0
```

91119065 RF LEAD

SAMPLE DATE: 7JAN80 1153:00
SAMPLE IDENTIFICATION: Q331A
TYPE OF SAMPLE: UNKNOWN
SAMPLE QUANTITY: 8011.000   UNITS: UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME: EFF.TAB1
```
*************************************************************
                              *
```
ACQUISITION DATE: 7JAN80 1656:21 * FWHM(1332)   2.390
PRESET TIME(LIVE):   600. SEC * SENSITIVITY: 5.000
ELAPSED REAL TIME: 609. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME: 600. SEC * NBR ITERATIONS: 10.
```
                              *
*************************************************************
                              *
```
DETECTOR: GELI-8   * LIBRARY:NUCL.LIB1
DATE CALIBRATED: 26OCT79 1434:06 * ENERGY TOLERANCE: 2.000KV
KEV/CHNL: 0.5003803   * HALF LIFE RATIO: 8.00
OFFSET: -0.5932283 KEV   * ABUNDANCE LIMIT: 85.00%
```
                              *
*************************************************************


UNKNOWN SAMPLE REPORT

| ELEMENT | PEAK ENERGY | BKGND | AREA | CONCENTR. | | 1 SIGMA ERROR | %ERROR |
|---|---|---|---|---|---|---|---|
| %-COPPER | 511.0 | 2314. | 4609. | 0.0300 | | 0.0008 | 2.5 |
| %-ANTIMONY | 564.2 | 370. | 67095. | 0.6309 | | 0.0029 | 0.5 |
| %-ARSENIC | 657.0 | 360. | 152. | 0.0075 | | 0.0015 | 19.6 |

```
1009:   96. 102.   95.   97. 112.   89. 147. 127. 174.
1018: 251. 392. 512. 744. 813. 894. 692. 528. 317.
1027: 208. 143. 105.   96. 103.   84.   95.   80.   79.

1117: 321. 460. 489. 432. 289. 295. 346. 679. 1774.
1126: 4853. 9907.14696.16329.12033. 5452. 1491. 281.   61.
1135:   38.   29.   31.   34.   36.   27.   31.   31.   23.

1301:   12.   15.   28.   20.   20.   21.   26.   23.   30.
1310:   24.   23.   27.   48.   55.   51.   40.   29.   18.
1319:   17.   13.   17.   15.   24.   15.   24.   19.   22.
```
             PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

| PK | IT | ENERGY | AREA | BKGND | FWHM | CHANNEL | LEFT | PW | CTS/SEC | %ERR |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 511.01 | 4609. | 2314. | 2.81 | 1022.43 | 1012 | 26 | 7.682E 00 | 2.1 |
| 2 | 5 | 559.58 | 2563. | 909. | 3.19 | 1119.50 | 1111 | 26 | 4.272E 00 | 2.6 |
| 3 | 5 | 564.16 | 67095. | 370. | 1.93 | 1128.64 | 1111 | 26 | 1.118E 02 | 0.4 |
| 4 | 1 | 602.79 | 1751. | 400. | 1.90 | 1205.84 | 1197 | 16 | 2.919E 00 | 2.9 |
| 5 | 1 | 646.06 | 185. | 268. | 2.80 | 1292.32 | 1285 | 17 | 3.086E-01 | 14.5 |
| 6 | 1 | 656.99 | 152. | 360. | 2.07 | 1314.17 | 1306 | 18 | 2.526E-01 | 19.5 |

```
*********************************************************************
****************** 8 JAN 1980  5:02:11 PM  ************************
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q331B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    9696.000        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*****************************************************************
                                    *
ACQUISITION DATE:  7JAN80 1706:43 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                    *
*****************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                    *
*****************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                  1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
---------------------------------------------------------------------------

%-COPPER         511.0     2639.      6013.   0.0327    0.0007       2.3
 %-ANTIMONY      564.2      484.     85849.   0.6682    0.0029       0.4
 %-ARSENIC       657.3      556.       226.   0.0093    0.0015      16.4

 1009:   136.    121.    139.    137.    122.    148.    149.    162.    209.
 1018:   319.    499.    702.    954.   1075.   1074.    968.    652.    437.
 1027:   266.    202.    143.    124.    115.    106.    104.     95.    111.

 1117:   382.    559.    625.    533.    417.    381.    448.    894.   2454.
 1126: 6190.  12589.  19024.  20869.  15165.   7091.   1912.    319.     80.
 1135:    41.     47.     50.     48.     45.     42.     41.     50.     40.

 1301:    14.     20.     22.     26.     18.     28.     28.     23.     21.
 1310:    27.     24.     41.     51.     69.     68.     52.     51.     40.
 1319:    23.     20.     16.     31.     26.     22.     13.     16.     26.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.02    6013.     2639.   2.85  1022.45 1011   23 1.002E 01  1.8
  2  3  560.19    2303.      774.   2.43  1120.71 1107   31 3.839E 00  2.7
  3  3  564.15   85849.      484.   1.94  1128.63 1107   31 1.431E 02  0.3
  4  1  602.84    2309.      572.   2.04  1205.94 1194   21 3.849E 00  2.5
  5  1  645.90     175.      436.   2.72  1292.01 1283   16 2.919E-01 18.5
  6  1  657.35     226.      556.   2.39  1314.88 1308   25 3.774E-01 16.2
```

```
*************************************************************
****************     8 JAN 1980  5:03:18 PM   ***************
*************************************************************

9111.9065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q331C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    10386.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************
                                     *
ACQUISITION DATE:  7JAN80 1717:09 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        614. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                     *
***********************************************************
                                     *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                     *
***********************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                                  1 SIGMA
ELEMENT          ENERGY    BKGND       AREA     CONCENTR.    ERROR        %ERROR
--------------------------------------------------------------------------------

%-COPPER         511.0     2748.      6875.     0.0352      0.0008          2.2
%-ANTIMONY       564.2      586.     94385.     0.6871      0.0029          0.4
%-ARSENIC        657.3      283.       236.     0.0091      0.0011         12.3

  1009:    127.    133.    115.    155.    123.    159.    154.    213.    293.
  1018:    398.    554.    777.   1061.   1168.   1205.   1045.    704.    499.
  1027:    303.    200.    158.    140.    113.    118.    121.     95.    115.

  1117:    472.    626.    703.    571.    460.    387.    519.    905.   2713.
  1126:   6818.  13939.  20634.  22971.  16679.   7900.   2155.    357.     91.
  1135:     54.     56.     51.     44.     41.     45.     45.     48.     51.

  1301:     23.     28.     37.     20.     25.     19.     24.     28.     20.
  1310:     28.     19.     36.     57.     65.     71.     61.     33.     33.
  1319:     30.     26.     18.     21.     27.     21.     41.     25.     32.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT   ENERGY     AREA      BKGND    FWHM   CHANNEL  LEFT PW    CTS/SEC    %ERR

  1  1   510.99     6875.     2748.    2.96   1022.40  1011.   24 1.146E 01   1.6
  2  6   559.58     3822.     1505.    3.51   1119.49  1111.   26 6.371E 00   2.2
  3  6   564.16    94385.      586.    1.95   1128.64  1111.   26 1.573E 02   0.3
  4  1   602.84     2518.      603.    1.96   1205.95  1197.   19 4.196E 00   2.4
  5  1   645.96      122.      450.    2.22   1292.12  1288.   15 2.036E-01  26.2
  6  1   657.32      236.      283.    2.33   1314.83  1309.   13 3.933E-01  12.0
```

91119065 RF LEAD

SAMPLE DATE: 7JAN80 1153:00
SAMPLE IDENTIFICATION: Q332A
TYPE OF SAMPLE: UNKNOWN
SAMPLE QUANTITY: 11093.00   UNITS: UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME: EFF.TAB1
****
                                           *
ACQUISITION DATE: 8JAN80 1117:43 * FWHM(1.332)   2.390
PRESET TIME(LIVE):   600. SEC * SENSITIVITY: 5.000
ELAPSED REAL TIME: 609. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME: 600. SEC * NBR ITERATIONS: 10.
                                           *
****
                                           *
DETECTOR: GELI-8   * LIBRARY:NUCL.L1B1
DATE CALIBRATED: 26OCT79 1434:06 * ENERGY TOLERANCE: 2.000KV
KEV/CHNL: 0.5003803   * HALF LIFE RATIO: 8.00
OFFSET: -0.5932283 KEV   * ABUNDANCE LIMIT: 85.00%
                                           *
****

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.1	1577.	1012.	0.0129	0.0008	6.5
%-ANTIMONY	564.2	422.	76010.	0.6272	0.0028	0.4
%-ARSENIC	657.4	279.	0. <	0.0047	NOT DETECTABLE	

1009:	85.	95.	100.	104.	109.	91.	102.	107.	119.
1018:	153.	139.	191.	236.	268.	299.	239.	186.	141.
1027:	116.	115.	97.	77.	94.	94.	96.	76.	89.
1117:	242.	288.	356.	339.	283.	294.	369.	794.	1975.
1126:	5156.	10703.	16164.	18078.	14045.	7044.	2080.	367.	78.
1135:	58.	33.	26.	36.	32.	29.	34.	36.	24.
1301:	14.	19.	15.	13.	15.	16.	15.	16.	19.
1310:	16.	14.	21.	30.	32.	23.	33.	18.	24.
1319:	16.	14.	19.	15.	15.	12.	8.	12.	5.

PULSE-PILE-UP CORRECTED DATA. CORRECTION = 1.000

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.09	1012.	1577.	2.44	1022.58	1014	17	1.686E 00	6.4
2	2	564.20	76010.	422.	1.98	1128.72	1109	30	1.267E 02	0.4
3	2	572.53	1499.	28.	2.44	1145.37	1109	30	2.499E 00	2.6
4	1	602.87	2420.	504.	1.97	1206.02	1197	24	4.033E 00	2.4
5	1	646.00	141.	190.	2.09	1292.20	1287	11	2.352E-01	16.2

```
**************************************************************
******************* 8 ? 1980  5:05:35 PM  ***************
**************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q332B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    12522.00        UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***************************************************************
                                *
ACQUISITION DATE:  7JAN80 1738:02 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:      615. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                *
***************************************************************
                                *
DETECTOR: GELI-8                * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                *
***************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                              1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR     %ERROR
------------------------------------------------------------------------

%-COPPER         511.0     2870.     3573.    0.0155     0.0005      3.1
%-ANTIMONY       564.2      695.   111912.    0.6783     0.0027      0.4
%-ARSENIC        657.3      443.      183.    0.0059     0.0011     18.1

 1009:  148.   150.   129.   148.   148.   153.   132.   176.   177.
 1018:  269.   365.   537.   580.   707.   667.   625.   462.   353.
 1027:  217.   188.   153.   140.   112.   129.   149.   142.   118.

 1117:  404.   530.   618.   526.   450.   429.   547.  1147.  3140.
 1126: 8034. 16446. 24776. 27130. 19897.  9311.  2403.   465.   111.
 1135:   78.    64.    51.    54.    56.    51.    58.    64.    58.

 1301:   43.    33.    25.    25.    31.    29.    23.    28.    40.
 1310:   28.    30.    38.    57.    66.    79.    61.    35.    29.
 1319:   32.    27.    31.    29.    25.    23.    30.    27.    22.
        PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.00     3573.     2870.    3.04   1022.41 1013   20 5.955E 00   2.7
 2  2  559.90     2014.     1065.    2.18   1120.14 1110   30 3.356E 00   3.2
 3  2  564.15   111912.      695.    1.94   1128.64 1110   30 1.865E 02   0.3
 4  1  602.78     2967.      665.    1.94   1205.84 1196   20 4.946E 00   2.2
 5  1  645.99      208.      556.    2.13   1292.18 1285   16 3.463E-01  17.5
 6  1  657.28      183.      443.    1.87   1314.74 1306   15 3.046E-01  17.9
```

```
91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q332C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9862.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                            *
ACQUISITION DATE:  7JAN80 1748:28 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       613. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                            *
*****************************************************************
                            *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                            *
*****************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	3241.	2911.	0.0161	0.0006	3.6
%-ANTIMONY	564.2	475.	92766.	0.7152	0.0030	0.4
%-ARSENIC	657.4	300.	86.	0.0035	0.0011	30.7

```
1009:  110.   119.   117.   112.   139.   143.   142.   166.   149.
1018:  212.   282.   394.   534.   623.   514.   520.   392.   283.
1027:  182.   148.   127.   115.   107.    94.   109.    98.   104.

1117:  342.   481.   469.   477.   346.   350.   445.   875.  2489.
1126: 6608. 13612. 20186. 22338. 16853.  7596.  2152.   351.    84.
1135:   52.    36.    38.    45.    37.    51.    46.    38.    32.

1301:   35.    23.    21.    22.    28.    29.    22.    18.    32.
1310:   26.    23.    23.    34.    46.    43.    43.    24.    29.
1319:   20.    28.    23.    26.    26.    24.    19.    17.    21.
        PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.01	2911.	3241.	2.86	1022.42	1011	28	4.852E 00	3.3
2	2	560.91	1840.	750.	2.41	1122.16	1107	32	3.066E 00	3.1
3	2	564.16	92766.	475.	1.95	1128.66	1107	32	1.546E 02	0.3
4	1	602.81	2451.	424.	1.99	1205.89	1198	16	4.085E 00	2.3
5	1	645.90	164.	546.	2.07	1292.01	1282	21	2.731E-01	21.6
6	1	657.42	86.	300.	2.30	1315.02	1310	11	1.428E-01	30.6

```
*****************************************************************************
****************** 8 JAN 1980  5:07:55 PM  *********************
*****************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q333A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   12598.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************************
                                     *
ACQUISITION DATE:  8JAN80 1128:05  * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                     *
*****************************************************************************
                                     *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                     *
*****************************************************************************


UNKNOWN SAMPLE REPORT


                    PEAK                                    1 SIGMA
ELEMENT            ENERGY     BKGND      AREA     CONCENTR.   ERROR       %ERROR
-----------------------------------------------------------------------------

%-COPPER           510.7      1523.      559.     0.0063     0.0007       10.8
%-ANTIMONY         564.2       520.    88608.     0.6450     0.0028        0.4
%-ARSENIC          657.5       205.      116.     0.0060     0.0012       20.0

  1009:  120.    120.    125.    125.    132.    109.    104.    111.    106.
  1018:  123.    133.    179.    188.    194.    170.    163.    140.    126.
  1027:  118.    110.    125.     90.    101.     91.    128.    102.     97.

  1117:  233.    306.    354.    388.    311.    307.    445.    830.   2330.
  1126: 5981.  12347.  18922.  21275.  16719.   8010.   2327.    424.     87.
  1135:   49.     47.     33.     46.     37.     46.     31.     32.     46.

  1301:   14.     15.     17.     15.     14.     17.     14.     15.     17.
  1310:   17.     21.     23.     27.     26.     38.     39.     23.     19.
  1319:   13.     19.     15.     21.     16.     13.     13.     13.     14.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC     %ERR

  1  1  510.71      559.     1523.    2.98  1021.83 1016   15 9.318E-01  10.7
  2 10  561.52     1475.      366.    1.07  1123.37 1111   28 2.458E 00   3.2
  3 10  564.20    88608.      520.    1.96  1128.74 1111   28 1.477E 02   0.3
  4  1  602.85     2853.      648.    1.89  1205.97 1199   27 4.756E 00   2.3
  5  1  646.20      167.      341.    2.17  1292.60 1284   15 2.790E-01  17.4
  6  1  657.49      116.      205.    2.58  1315.17 1308   13 1.927E-01  19.8
```

```
**********************************************************************
********************  8 JAN 1980  5:09:00 PM  **********************
**********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q333B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11767.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
**************************************************************
                                  *
ACQUISITION DATE:  8JAN80 1138:31 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                  *
**************************************************************
                                  *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:          0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:           -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                  *
**************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                               1 SIGMA
ELEMENT          ENERGY     BKGND      AREA    CONCENTR.    ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER         511.0      1543.      501.     0.0061     0.0007      12.0
%-ANTIMONY       564.2       575.    91720.     0.7162     0.0030       0.4
%-ARSENIC        657.4       318.       0. <    0.0047    NOT DETECTABLE

  1009:  108.   106.   104.   122.   105.   104.   109.   114.   108.
  1018:  108.   134.   157.   199.   183.   196.   174.   167.   130.
  1027:  124.   112.   109.   109.   107.   120.    93.   110.   108.

  1117:  266.   328.   363.   382.   342.   330.   418.   857.  2324.
  1126: 6208. 12844. 19505. 22369. 17067.  8290.  2453.   426.    79.
  1135:   55.    51.    50.    44.    40.    39.    43.    49.    56.

  1301:   17.    19.    18.    25.    19.    24.    17.    10.    16.
  1310:   21.    25.    27.    33.    31.    29.    34.    27.    18.
  1319:   16.    23.    18.    21.    19.    12.    17.    22.    26.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000


 PK IT  ENERGY    AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC   %ERR

  1  1  511.03     501.     1543.    2.60   1022.47 1016   14 8.347E-01 12.0
  2  2  560.35    1286.      798.    2.16   1121.04 1108   36 2.143E 00  4.2
  3  2  564.20   91720.      575.    1.95   1128.73 1108   36 1.529E 02  0.3
  4  1  602.87    3081.      509.    2.08   1206.01 1195   21 5.135E 00  2.1
  5  1  645.74     221.      246.    2.25   1291.68 1286   12 3.682E-01 12.1
```

```
*************************************************************************
*****************   8 JAN 1980   5:10:05 PM   ********* *****************
*************************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q333C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    11840.00          UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
************************************************************************
                                   *
ACQUISITION DATE:   8JAN80 1148:57 * FWHM(1332)           2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:          5.000
ELAPSED REAL TIME:        613. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:     10.
                                   *
************************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803       * HALF LIFE RATIO:    8.00
OFFSET:           -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                                   *
************************************************************************


UNKNOWN SAMPLE REPORT


                    PEAK                                 1. SIGMA
ELEMENT            ENERGY    BKGND      AREA      CONCENTR.    ERROR      %ERROR
------------------------------------------------------------------------------

%-COPPER           511.3     2252.       766.    0.0094      0.0009       9.6
%-ANTIMONY         564.2      569.     97956.    0.7615      0.0031       0.4
%-ARSENIC          657.4      336.         0. <  0.0049      NOT DETECTABLE

 1009:   107.   115.   113.   119.   100.   113.   107.   127.   142.
 1018:   119.   135.   176.   183.   224.   210.   187.   172.   181.
 1027:   131.   125.   131.   122.   103.    86.   111.   114.   104.

 1117:   298.   339.   392.   415.   368.   345.   493.   943.  2489.
 1126:  6828. 13535. 21076. 23393. 18304.  8867.  2660.   516.   105.
 1135:    60.    57.    59.    48.    45.    44.    46.    49.    42.

 1301:    22.    16.    23.    25.    18.    23.    22.    20.    17.
 1310:    23.    25.    33.    30.    42.    32.    34.    28.    23.
 1319:    23.    15.    11.    18.    27.    23.    18.    17.    22.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.26      766.      2252.   3.41   1022.94 1012   21 1.277E 00   9.5
 2  2  560.72     1466.       803.   2.21   1121.77 1109   29 2.443E 00   3.8
 3  2  564.20    97956.       569.   1.97   1128.73 1109   29 1.633E 02   0.3
 4  1  602.85     3107.       508.   2.01   1205.98 1197   19 5.179E 00   2.1
 5  1  646.24      228.       328.   2.29   1292.68 1286   16 3.808E-01  13.0
```

```
****************************************************************
****************     8 JAN 1980   5:11:13 PM   **************
****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q334A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    9873.000       UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
***************************************************************
                              *
ACQUISITION DATE:   8JAN80 1159:23 * FWHM(1332)       2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:        610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                              *
***************************************************************
                              *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:        -0.5932283 KEV      * ABUNDANCE LIMIT:   85.00%
                              *
***************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1. SIGMA ERROR	%ERROR
%-COPPER	510.8	1197.	444.	0.0066	0.0008	12.1
%-ANTIMONY	564.2	425.	73353.	0.6851	0.0031	0.5
%-ARSENIC	657.8	271.	83.	0.0055	0.0017	30.2

```
 1009:   92.    99.    98.    90.    86.   1.05.   99.    89.    86.
 1018:   96.   114.   133.   166.   162.   152.   131.   117.   107.
 1027:  101.    80.    78.    76.    67.    84.    83.   100.    75.

 1117:  189.   271.   311.   301.   251.   260.   337.   697.  1929.
 1126: 5018. 10210. 15494. 17604. 13640.  6748.  2020.   383.    70.
 1135:   44.    37.    38.    31.    37.    30.    22.    24.    20.

 1301:   16.    10.    11.    16.    16.    10.    14.    13.    18.
 1310:   21.    18.    14.    15.    30.    32.    30.    21.    17.
 1319:   17.    14.    19.    21.    15.     9.     6.    12.    13.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1.	510.85	444.	1197.	2.74	1022.10	1016	14	7.406E-01	12.0
2	2	560.27	1063.	598.	2.20	1120.87	1108	37	1.772E 00	4.5
3	2	564.20	73353.	425.	1.97	1128.73	1108	37	1.223E 02	0.4
4	1	602.84	2348.	347.	1.94	1205.95	1198	18	3.914E 00	2.3
5	1	646.14	163.	174.	1.99	1292.48	1287	12	2.717E-01	13.9
6	1	657.81	83.	271.	2.67	1315.81	1311	19	1.386E-01	30.0

```
*********************************************************************
******************   8 JAN 1980  5:12:22 PM   ****************
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 11:53:00
SAMPLE IDENTIFICATION:   Q334B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11470.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                        *
ACQUISITION DATE:  7JAN80 1840:44 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        614. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                        *
*********************************************************************
                                        *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                        *
*********************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                    1 SIGMA
ELEMENT        ENERGY    BKGND      AREA     CONCENTR.   ERROR      %ERROR
---------------------------------------------------------------------------

%-COPPER       511.1.    2075.     1492.     0.0075     0.0004       5.2
%-ANTIMONY     564.2      601.   107066.     0.7163     0.0029       0.4
%-ARSENIC      657.1.     443.      127.     0.0046     0.0012      25.2

1009:  141.   170.   134.   148.   123.   125.   134.   135.   156.
1018:  171.   197.   255.   304.   372.   355.   297.   242.   227.
1027:  161.   132.   129.   139.    99.   114.   129.   117.   115.

1117:  333.   475.   497.   471.   423.   379.   539.  1030.  2951.
1126: 7586. 15507. 23327. 25822. 19295.  9114.  2551.   449.    96.
1135:   73.    45.    39.    53.    48.    48.    55.    48.    38.

1301:   36.    32.    26.    21.    24.    24.    26.    26.    33.
1310:   17.    31.    32.    44.    47.    57.    44.    26.    36.
1319:   22.    19.    19.    28.    30.    29.    29.    24.    20.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000

PK IT  ENERGY     AREA      BKGND   FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.09    1492.      2075.   2.91   1022.59 1014  18 2.486E 00    5.0
 2  2  560.14    1817.       787.   2.20   1120.62 1107  45 3.029E 00    3.2
 3  2  564.17  107066.       601.   1.95   1128.66 1107  45 1.784E 02    0.3
 4  1  602.84    2897.       500.   1.92   1205.95 1198  16 4.828E 00    2.2
 5  1  645.75     164.       777.   2.08   1291.70 1282  28 2.734E-01   25.3
 6  1  657.07     127.       443.   2.62   1314.32 1309  15 2.120E-01   25.0
```

```
*****************************************************************
*****************    8 █ 1980   5:13:33 PM   *****█***********
*****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q334C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   13249.00        UNITS:  UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                   *
ACQUISITION DATE:  7JAN80 1851.:10 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC   * SENSITIVITY:      5.000
ELAPSED REAL TIME:      617. SEC   * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC   * NBR ITERATIONS:  10.
                                   *
*****************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803          * HALF LIFE RATIO:   8.00
OFFSET:       -0.5932283 KEV       * ABUNDANCE LIMIT:  85.00%
                                   *
*****************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                 1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.  ERROR      %ERROR
----------------------------------------------------------------------

%-COPPER        511.0     2520.     1501.    0.0066    0.0004       5.6
 %-ANTIMONY     564.2      832.   127387.    0.7392    0.0028       0.4
 %-ARSENIC      657.0      473.      171.    0.0054    0.0011      19.7

 1009:   160.   164.    178.    137.    163.    176.    146.    162.    164.
 1018:   235.   230.    304.    359.    420.    409.    354.    297.    216.
 1027:   188.   175.    160.    158.    127.    144.    143.    151.    133.

 1117:   443.   588.    630.    591.    493.    442.    637.   1257.   3443.
 1126:  9014. 18437.  27685.  30667.  23318. 10704.   2984.    514.    131.
 1135:    70.    60.     76.     65.     86.     45.     53.     50.     64.

 1301:    38.    30.     29.     19.     28.     26.     29.     25.     26.
 1310:    30.    26.     48.     37.     64.     46.     51.     42.     25.
 1319:    26.    34.     27.     23.     19.     25.     28.     28.     26.
             PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.04    1501.    2520.    2.63   1022.48 1015   1.7 2.502E 00   5.4
  2  2  560.06    2067.    1298.    2.18   1120.45 1112   26  3.445E 00   3.3
  3  2  564.17  127387.     832.    1.95   1128.67 1112   26  2.123E 02   0.3
  4  1  602.84    3508.     660.    1.91   1205.95 1195   20  5.847E 00   2.0
  5  1  646.04     188.     548.    2.17   1292.28 1284   15  3.131E-01  19.1
  6  1  657.01     171.     473.    2.39   1314.21 1309   18  2.856E-01  19.5
```

```
***************************************************************
*******************   8 ●N 1980   5:14:42 PM   *****●***********
***************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q335A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    11855.00          UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*************************************************************
                                    *
ACQUISITION DATE:   7JAN80 1901:39 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                    *
*************************************************************
                                    *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803       * HALF LIFE RATIO:    8.00
OFFSET:           -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                                    *
*************************************************************


UNKNOWN SAMPLE REPORT

                    PEAK                                   1 SIGMA
ELEMENT            ENERGY    BKGND      AREA     CONCENTR.   ERROR      %ERROR
---------------------------------------------------------------------------

%-COPPER           511.1     1975.     1071.     0.0053     0.0004       6.8
%-ANTIMONY         564.2      670.    90211.     0.5861     0.0025       0.4
%-ARSENIC          657.2      285.      294.     0.0104     0.0011      10.3

 1009:   123.  112.    99.  125.   133.   105.   105.    114.  120.
 1018:   154.  168.   189.  230.   259.   260.   248.    206.  163.
 1027:   149.  116.    90.   92.    92.   103.   108.    115.  100.

 1117:   450.  582.   636.  549.   413.   327.   487.    938. 2437.
 1126:  6298. 12921. 19771. 22004. 16516. 7629. 2169.   369.   83.
 1135:    59.   41.    50.   47.    38.    40.    38.     39.   34.

 1301:    19.   27.    15.   17.    17.    12.    28.     10.   22.
 1310:    22.   28.    30.   56.    70.    77.    53.     39.   32.
 1319:    18.   15.    19.   21.    20.    20.    16.     12.   30.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC   %ERR

  1  1  511.13    1071.    1975.    3.05   1022.68 1011   20 1.786E 00   6.6
  2  3  560.64    2424.    1101.    2.64   1121.62 1109   45 4.039E 00   2.8
  3  3  564.17   90211.     670.    1.93   1128.68 1109   45 1.504E 02   0.3
  4  1  602.85    2478.     356.    1.99   1205.97 1198   16 4.131E 00   2.3
  5  1  645.99     212.     338.    2.31   1292.18 1282   18 3.533E-01  14.0
  6  1  657.20     294.     285.    2.38   1314.59 1306   20 4.895E-01  10.0
```

```
********************************************************************
******************** 8 JAN 1980  5:15:49 PM  ********************
********************************************************************

911.19065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q335B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   14080.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1213:30 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                   *
*****************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                   *
*****************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1. SIGMA ERROR	%ERROR
%-COPPER	511.1	1547.	495.	0.0052	0.0006	12.2
%-ANTIMONY	564.2	472.	94328.	0.6193	0.0026	0.4
%-ARSENIC	657.3	368.	168.	0.0079	0.0014	18.1

```
  1009:  136.   116.   125.   131.   124.   128.   126.   116.   129.
  1018:  124.   135.   151.   172.   221.   175.   177.   161.   132.
  1027:  106.   128.   104.    96.   104.   104.   107.   110.   119.

  1117:  376.   467.   547.   511.   392.   407.   476.   937.  2631.
  1126: 6757. 13253. 19833. 22236. 17327. 8606.  2670.   518.   115.
  1135:   61.    50.    49.    43.    36.    43.    40.    31.    33.

  1301:   23.    30.    23.    23.    19.    18.    11.    17.    17.
  1310:   15.    19.    26.    40.    46.    56.    46.    27.    28.
  1319:   16.    19.    13.    18.    16.    24.    18.    15.    11.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.11	495.	1547.	2.49	1022.63	1016	14	8.247E-01	12.1
2	3	560.40	2121.	749.	2.48	1121.12	1109	29	3.536E 00	2.8
3	3	564.19	94328.	472.	2.00	1128.71	1109	29	1.572E 02	0.3
4	1	602.86	3077.	468.	2.02	1205.99	1197	17	5.128E 00	2.1
5	1	646.14	253.	419.	2.16	1292.48	1281	27	4.222E-01	13.0
6	1	657.31	168.	368.	2.14	1314.82	1308	21	2.795E-01	17.9

```
********************************************************************
****************** 8 JAN 1980  5:16:59 PM  *********************
********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q335C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    9464.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                      *
ACQUISITION DATE:  7JAN80 1922:32 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:      610. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                      *
*********************************************************************
                                      *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                      *
*********************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                   1 SIGMA
ELEMENT        ENERGY   BKGND     AREA    CONCENTR.    ERROR       %ERROR
---------------------------------------------------------------------------

%-COPPER       511.0    1544.     769.    0.0048      0.0004        8.2
%-ANTIMONY     564.2     619.   77809.    0.6356      0.0028        0.4
%-ARSENIC      657.3     257.     185.    0.0083      0.0012       14.5

 1009:   104.   101.   101.   103.   102.   124.    98.   118.   114.
 1018:   119.   160.   166.   204.   239.   206.   197.   162.   124.
 1027:   111.   126.    94.    76.    88.    91.   106.    85.    87.

 1117:   382.   510.   532.   496.   364.   321.   369.   736.  2141.
 1126:  5434. 11182. 16945. 18914. 14182.  6712.  1893.   324.    58.
 1135:    45.    36.    28.    27.    40.    43.    27.    39.    22.

 1301:    19.    10.     9.    18.    18.    14.    17.    18.    12.
 1310:    19.    15.    19.    44.    52.    63.    44.    29.    20.
 1319:    17.    11.    21.    11.    19.    14.    12.     9.    18.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  510.96     769.     1544.   2.82  1022.32 1015   16 1.282E 00   8.1
 2  5  559.55    2755.     1254.   3.16  1119.44 1111   51 4.592E 00   2.6
 3  5  564.18   77809.      619.   1.94  1128.68 1111   51 1.297E 02   0.4
 4  1  602.81    2166.      513.   1.98  1205.89 1195   25 3.610E 00   2.6
 5  1  646.03     203.      290.   3.04  1292.26 1283   20 3.385E-01  13.8
 6  1  657.25     185.      257.   1.91  1314.69 1307   18 3.090E-01  14.3
```

```
***********************************************************************
*****************    8 JAN 1980  5:18:11 PM   *****************
***********************************************************************

911.19065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q336A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    8158.000          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                                       *
ACQUISITION DATE:  8JAN80 1223:57  * FWHM(1332)          2.390
PRESET TIME(LIVE):       600.  SEC  * SENSITIVITY:        5.000
ELAPSED REAL TIME:       607.  SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600.  SEC  * NBR ITERATIONS:    10.
                                       *
***********************************************************************
                                       *
DETECTOR: GELI-8                    * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803          * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                                       *
***********************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                                   1 SIGMA
ELEMENT          ENERGY     BKGND       AREA     CONCENTR.    ERROR       %ERROR
-----------------------------------------------------------------------------------

%-COPPER         511.0      1024.       374.      0.0069      0.0009       13.2
%-ANTIMONY       564.2       245.     56220.      0.6383      0.0032        0.5
%-ARSENIC        656.8       171.        78.      0.0063      0.0017       26.5

 1009:    64.     82.     56.     59.     57.     67.     67.     72.     70.
 1018:    70.     85.     98.     97.    123.    122.    109.     91.     87.
 1027:    75.     67.     63.     62.     72.     62.     47.     68.     68.

 1117:   185.    205.    218.    239.    197.    210.    278.    578.   1556.
 1126:  3917.   7819.  11728.  13205.  10283.   5371.   1.661.   355.     73.
 1135:    41.     18.     18.     15.     16.     17.     16.     28.     14.

 1301:     9.      7.     12.     10.      9.      9.     11.     15.     11.
 1310:    14.      8.     13.     24.     23.     22.     17.     14.      9.
 1319:    11.     10.      7.     10.     14.      6.     16.     12.      9.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.03     374.     1024.    2.98   1022.48 1013   1.7 6.236E-01 13.2
 2  2  559.82     798.      407.    2.26   1119.98 1110  29 1.330E 00   5.0
 3  2  564.20   56220.      245.    2.02   1128.73 1110  29 9.370E 01   0.4
 4  1  602.87    1751.      294.    1.92   1206.01 1197  21 2.918E 00   2.8
 5  1  646.12     207.      176.    3.32   1292.45 1281  19 3.444E-01 11.4
 6  1  656.78      78.      171.    2.62   1313.75 1306  18 1.296E-01 26.4
```

```
*******************************************************************
********************  8 JAN 1980  5:19:20 PM  *******************
*******************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   0336B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    10453.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*******************************************************************
                                   *
ACQUISITION DATE:  7JAN80 1943:17 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                   *
*******************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL.:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                   *
*******************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                              1 SIGMA
ELEMENT          ENERGY    BKGND     AREA    CONCENTR.  ERROR      %ERROR
-------------------------------------------------------------------------

%-COPPER          510.9     1824.    1005.    0.0058    0.0004      6.9
%-ANTIMONY        564.2      511.   90332.    0.6705    0.0028      0.4
%-ARSENIC         657.3      257.     123.    0.0051    0.0010     20.6

  1009:   147.    123.     91.    131.   110.   124.   119.   119.   126.
  1018:   157.    188.    219.    258.   276.   288.   220.   196.   167.
  1027:   142.    107.    104.     98.   115.    91.    98.    98.    84.

  1117:   303.    342.    442.    436.   346.   356.   454.   923.  2326.
  1126:  6222.  13016.  19684.  22123. 16538.  7633.  2173.   387.    79.
  1135:    51.     50.     45.     39.    46.    40.    38.    41.    34.

  1301:    23.     28.     30.     28.    24.    17.    24.    23.    15.
  1310:    21.     21.     27.     30.    50.    32.    39.    28.    26.
  1319:    16.     19.     13.     23.    23.    20.    17.    19.    20.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000

PK IT   ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1   510.92    1005.    1824.   2.86  1022.25 1015  16 1.674E 00   6.8
  2  2   560.22    1573.     703.   2.17  1120.77 1107  39 2.622E 00   3.5
  3  2   564.18   90332.     511.   1.93  1128.68 1107  39 1.506E 02   0.3
  4  1   602.85    2685.     690.   2.01  1205.97 1199  23 4.474E 00   2.4
  5  1   646.13     275.     320.   3.28  1292.46 1282  16 4.589E-01  11.0
  6  1   657.29     123.     257.   2.20  1314.77 1308  13 2.057E-01  20.4
```

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q336C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    11304.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                  *
ACQUISITION DATE:  7JAN80 1953:44 * FWHM(1332)          2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:         5.000
ELAPSED REAL TIME:      614. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:    10.
                                  *
*********************************************************************
                                  *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                  *
*********************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1. SIGMA ERROR	%ERROR
%-COPPER	511.1	2104.	1303.	0.0071	0.0004	5.9
%-ANTIMONY	564.2	696.	104235.	0.7168	0.0029	0.4
%-ARSENIC	656.8	375.	208.	0.0079	0.0012	15.1

```
1009:  124.  131.  157.  133.  138.  133.  143.  132.  160.
1018:  151.  211.  248.  293.  332.  349.  296.  239.  196.
1027:  159.  148.  135.  112.  112.  124.  131.  108.  118.

1117:  351.  465.  457.  445.  382.  399.  543. 1065. 2727.
1126: 7430.14870.23107.25302.18884. 8828. 2456.  429.   89.
1135:   62.   62.   58.   50.   45.   41.   47.   47.   49.

1301:   23.   32.   18.   35.   32.   23.   23.   18.   24.
1310:   28.   28.   27.   50.   57.   50.   37.   36.   27.
1319:   15.   18.   26.   29.   22.   21.   23.   20.   24.
        PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.06	1303.	2104.	2.84	1022.53	1014	17	2.1.72E 00	5.7
2	2	559.66	1547.	1059.	2.18	1119.65	1112	30	2.578E 00	3.9
3	2	564.17	104235.	696.	1.93	1128.67	1112	30	1.737E 02	0.3
4	1	602.83	2880.	587.	1.97	1205.93	1199	17	4.800E 00	2.2
5	1	645.74	170.	518.	2.00	1291.68	1280	18	2.834E-01	20.4
6	1	656.75	208.	375.	3.10	1313.69	1305	15	3.461E-01	14.9

```
***************************************************************
****************  8 ● 1980  5:21:40 PM  ****** ●***********
***************************************************************

9111.9065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q337A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9607.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2004:09 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      610. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                    *
*****************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                    *
*****************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                                1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER          511.1     2148.      901.    0.0058     0.0005        8.1
%-ANTIMONY        564.2      427.    73539.    0.5961     0.0027        0.5
%-ARSENIC         657.1      278.      243.    0.0109     0.0013       11.9

  1009:    93.    74.    100.    85.    96.   102.   112.   105.   107.
  1018:   126.   128.   166.   205.   236.   237.   210.   173.   154.
  1027:    99.    97.   101.    82.    87.    79.    89.    69.    84.

  1117:   379.   513.   549.   452.   374.   313.   369.   675.  1918.
  1126:  5051. 10351. 16142. 18027. 13520.  6333.  1797.   334.    72.
  1135:    32.    39.    43.    35.    30.    20.    30.    30.    29.

  1301:    15.    13.    30.    15.    16.    21.    19.    17.    19.
  1310:    17.    22.    22.    61.    50.    63.    59.    30.    26.
  1319:    22.    18.    19.    14.    24.    17.     7.    16.    16.
          PULSE-PILE-UP CORRECTED DATA. CORRECTION =  1.000

PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC     %ERR

 1  1  511.12      901.    2148.    2.93  1022.65 1012   24 1.502E 00    8.0
 2  9  559.52     3204.    1069.    3.57  1119.38 1109   28 5.340E 00    2.3
 3  9  564.18    73539.     427.    1.92  1128.70 1109   28 1.226E 02    0.4
 4  1  602.87     2054.     392.    1.95  1206.01 1197   16 3.423E 00    2.6
 5  1  646.26      209.     332.    3.95  1292.72 1284   17 3.480E-01   14.1
 6  1  657.12      243.     278.    2.48  1314.42 1308   15 4.052E-01   11.6
```

```
**************************************************************
****************** 8 JAN 1980  5:22:49 PM  ******************
**************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q337B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    10572.00        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
**********************************************************
                              *
ACQUISITION DATE:  7JAN80 2014:32 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:        611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                              *
**********************************************************
                              *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
 KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
 OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                              *
**********************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                                 1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
--------------------------------------------------------------------------

%-COPPER         511.0     1645.      885.    0.0052     0.0004        7.4
%-ANTIMONY       564.2      478.    82048.    0.6055     0.0026        0.4
%-ARSENIC        657.2      352.      220.    0.0090     0.0013       14.0

 1009:   108.    108.     95.    109.     99.    101.    98.     96.    114.
 1018:   145.    139.    183.    236.    238.    255.   209.    186.    142.
 1027:   114.    118.     93.    106.     93.     95.    98.     93.    106.

 1117:   370.    561.    601.    518.    407.    347.   404.    843.   2078.
 1126:  5621.  11393.  17889.  19846.  15262.  7360.  2052.    377.     81.
 1135:    48.     37.     34.     35.     35.     31.    32.     51.     22.

 1301:    20.     20.     20.     20.     16.     20.    16.     21.     21.
 1310:    18.     21.     37.     47.     61.     57.    45.     38.     30.
 1319:    26.     20.     19.     16.     18.     14.    18.     12.     28.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT   ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC   %ERR

 1  1  511.02     885.      1645.    2.68   1022.46 1015   17 1.476E 00   7.3
 2  6  559.58    3322.      1168.    3.37   1119.50 1109   31 5.536E 00   2.3
 3  6  564.19   82048.       478.    1.94   1128.72 1109   31 1.367E 02   0.4
 4  1  602.86    2281.       515.    1.89   1205.99 1198   21 3.802E 00   2.5
 5  1  645.84     169.       236.    2.27   1291.88 1287   11 2.813E-01  15.0
 6  1  657.17     220.       352.    2.64   1314.53 1304   19 3.669E-01  13.8
```

```
*******************************************************************
*****************    8 JAN 1980  5:24:00 PM    ********************
*******************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q337C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    9809.000        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*****************************************************************
                                     *
ACQUISITION DATE:  7JAN80 2024:58 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                     *
*****************************************************************
                                     *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                     *
*****************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	510.9	2010.	976.	0.0063	0.0005	7.4
%-ANTIMONY	564.2	654.	79629.	0.6345	0.0028	0.4
%-ARSENIC	657.4	401.	0. <	0.0043	NOT DETECTABLE	

```
1009:  100.  125.   95.   95.  106.  103.  112.  102.  117.
1018:  126.  140.  211.  236.  272.  250.  195.  191.  161.
1027:  127.   93.   89.   90.   86.  103.   98.   92.  100.

1117:  358.  523.  652.  556.  387.  308.  396.  758. 2040.
1126: 5535.11507.17277.19293.14662. 6941. 1941.  369.   87.
1135:   41.   37.   45.   36.   34.   23.   32.   31.   30.

1301:   18.   21.   14.   21.   21.   13.   10.   20.   14.
1310:   19.   22.   32.   38.   61.   57.   57.   27.   20.
1319:   15.   17.   22.   20.   12.   17.   11.   24.   18.
         PULSE-PILE-UP CORRECTED DATA. CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	510.93	976.	2010.	2.89	1022.27	1013	20	1.626E 00	7.2
2	4	559.60	2907.	1099.	2.86	1119.53	1112	54	4.845E 00	2.5
3	4	564.18	79629.	654.	1.95	1128.69	1112	54	1.327E 02	0.4
4	1	602.88	2322.	351.	2.10	1206.03	1196	18	3.870E 00	2.4
5	1	652.73	204.	1082.	12.15	1305.66	1280	42	3.405E-01	23.8

```
***************************************************************************
******************* 8 JAN 1980  5:25:08 PM  ******************
***************************************************************************

9111.9065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q338A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11368.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***************************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2035:20 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                    *
***************************************************************************
                                    *
DETECTOR: GELI-8                    * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803          * HALF LIFF RATIO:   8.00
OFFSET:        -0.5932283 KEV       * ABUNDANCE LIMIT:  85.00%
                                    *
***************************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                                    1 SIGMA
ELEMENT          ENERGY      BKGND       AREA     CONCENTR.    ERROR       %ERROR
-------------------------------------------------------------------------------

%-COPPER          511.0       2005.      1997.      0.0112     0.0005       4.1
%-ANTIMONY        564.2        504.     89900.      0.6193     0.0026       0.4
%-ARSENIC         657.2        450.       448.      0.0173     0.0015       8.6

  1009:  122.    126.    109.    110.    118.    126.    125.    141.    149.
  1018:  190.    206.    302.    386.    417.    403.    369.    308.    195.
  1027:  148.    133.    110.     98.    105.    118.    129.    118.     94.

  1117:  584.    804.    967.    764.    570.    361.    456.    903.   2293.
  1126: 6237.  12879.  19548.  22079.  16352.  7755.   2191.    394.     95.
  1135:   48.     44.     44.     32.     42.     51.     32.     29.     47.

  1301:   24.     15.     17.     18.     12.     28.     21.     23.     25.
  1310:   16.     48.     52.     82.     94.     94.     83.     61.     23.
  1319:   29.     18.     21.     14.     10.     17.     16.     16.     20.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL  LFFT PW  CTS/SEC    %ERR

  1  1  511.01    1997.     2005.    2.97  1022.43  1012  19 3.328E 00   3.9
  2  5  559.45    4694.      952.    2.84  1119.23  1107  34 7.823E 00   1.7
  3  5  564.18   89900.      504.    1.93  1128.69  1107  34 1.498E 02   0.3
  4  1  602.83    2538.      518.    1.97  1205.93  1195  19 4.230E 00   2.4
  5  1  645.88     162.      301.    2.26  1291.95  1286  14 2.699E-01  17.1
  6  1  657.16     448.      450.    2.71  1314.51  1304  25 7.461E-01   8.2
```

```
****************************************************************
****************** 8 JAN 1980  5:26:20 PM   *****************
****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q338B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    11.406.00         UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
****************************************************************
                                *
ACQUISITION DATE:  7JAN80 2045:47 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:       612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                *
****************************************************************
                                *
DETECTOR: GELI-8                * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL.:        0.5003803      * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                                *
****************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                                  1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
------------------------------------------------------------------------------

%-COPPER         511.1.    2066.      1919.    0.0108    0.0005        4.3
%-ANTIMONY       564.2     567.      93141.    0.6407    0.0027        0.4
%-ARSENIC        657.3     287.       377.     0.0145    0.0012        8.6

 1009:  127.   122.   129.   124.   130.   132.   121.   /127.   144.
 1018:  177.   226.   305.   388.   432.   399.   401.    319.   224.
 1027:  195.   137.   114.   111.   118.   115.   100.    121.   142.

 1117:  631.   867.   994.   789.   617.   403.   454.    869.  2331.
 1126: 6274. 13330. 20004. 22597. 17183.  8326.  2396.   460.    94.
 1135:   59.    62.    58.    44.    32.    38.    44.     43.    49.

 1301:   23.    24.    27.    30.    23.    16.    24.     29.    20.
 1310:   18.    30.    46.    68.   104.   111.    77.     61.    39.
 1319:   17.    24.    13.    17.    16.    22.    17.     14.    19.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =   1.000

 PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.08    1919.     2066.    2.89  1022.56 1015   17 3.198E 00   4.1
  2  4  559.42    4796.     1040.    2.77  1119.18 1107   36 7.994E 00   1.7
  3  4  564.19   93141.      567.    1.95  1128.71 1107   36 1.552E 02   0.3
  4  1  602.88    2665.      495.    2.04  1206.04 1195   20 4.441E 00   2.3
  5  1  645.92     147.      394.    2.11  1292.04 1283   15 2.453E-01  20.8
  6  1  657.30     377.      287.    2.03  1314.79 1309   14 6.277E-01   8.2
```

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q338C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   14742.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2056:13 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        617. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                    *
*********************************************************************
                                    *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:          0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:           -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                    *
*********************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                 1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.  ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER         511.0     3121.     2782.    0.0122    0.0005       3.7
%-ANTIMONY       564.2      852.   127400.    0.6793    0.0026       0.4
%-ARSENIC        657.3      485.      496.    0.0149    0.0012       8.1

 1009:   176.   180.   166.   183.   174.   172.   186.   185.   235.
 1018:   254.   334.   431.   549.   606.   603.   540.   430.   324.
 1027:   217.   201.   169.   150.   155.   145.   155.   144.   161.

 1117:   861.  1200.  1309.  1107.   750.   535.   646.  1235.  3367.
 1126:  8897. 18188. 27649. 30797. 23347. 11116.  3275.   576.   147.
 1135:    80.    85.    73.    73.    62.    69.    59.    54.    77.

 1301:    36.    34.    24.    43.    22.    35.    34.    35.    26.
 1310:    37.    40.    68.    97.   132.   153.   123.    62.    34.
 1319:    22.    35.    31.    37.    31.    32.    27.    26.    33.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.05    2782.    3121.    2.90  1022.50 1013  19  4.637E 00    3.4
 2  5  559.42    6440.    1586.    2.82  1119.17 1110  33  1.073E 01    1.5
 3  5  564.18  127400.     852.    1.95  1128.69 1110  33  2.123E 02    0.3
 4  1  602.82    3619.     670.    1.98  1205.91 1195  19  6.032E 00    1.9
 5  1  646.04     239.     384.    2.01  1292.28 1287  13  3.991E-01   13.2
 6  1  657.26     496.     485.    1.92  1314.70 1309  17  8.272E-01    7.7
```

```
***************************************************************
******************** 8 JAN 1980  5:28:40 PM  ******************
***************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q339A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9328.000         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
******************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2106:43 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      611. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                    *
******************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                    *
******************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
------------------------------------------------------------------------

%-COPPER        511.0     2488.     2955.     0.0207     0.0007      3.3
%-ANTIMONY      564.2     2536.    81681.     0.6895     0.0031      0.4
%-ARSENIC       657.4      223.        0. <   0.0034     NOT DETECTABLE

  1009:   93.    95.   115.   110.    99.   118.   115.   130.   142.
  1018:  176.   278.   384.   518.   557.   548.   510.   380.   273.
  1027:  169.   136.   102.   118.    80.    89.    87.    86.    91.

  1117:  204.   207.   218.   235.   268.   292.   408.   746.  2096.
  1126: 5765. 11679. 17706. 19653. 15081.  7217.  2028.   330.    73.
  1135:   48.    39.    35.    34.    38.    38.    35.    40.    31.

  1301:   13.    28.    24.    17.    12.    15.    21.    14.    16.
  1310:   14.    14.    20.    23.    18.    11.    19.    24.    18.
  1319:   13.    18.    15.    16.    15.    19.    11.    18.    23.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

  1  1  511.03    2955.    2488.    2.94  1022.48 1013   25 4.925E 00   3.0
  2  1  564.18   81681.    2536.    1.96  1128.70 1118   21 1.361E 02   0.4
  3  1  602.83    2232.     650.    1.96  1205.92 1194   26 3.721E 00   2.7
  4  1  645.87     147.     425.    1.95  1291.95 1283   20 2.442E-01  21.5
```

```
*********************************************************************
***************** 8 JAN 1980  5:29:48 PM  ***************************
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q339B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   13724.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                      *
ACQUISITION DATE:  7JAN80 2117:06 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        616. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                      *
*********************************************************************
                                      *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                      *
*********************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                1 SIGMA
ELEMENT         ENERGY    BKGND      AREA     CONCENTR.    ERROR     %ERROR
-----------------------------------------------------------------------------

%-COPPER        511.1     3366.     4267.     0.0205     0.0006       2.9
%-ANTIMONY      564.2     3924.   121513.     0.6985     0.0028       0.4
%-ARSENIC       657.4      370.        0. <   0.0030      NOT DETECTABLE

  1009:   154.   164.   152.   155.   173.   177.   191.   183.   223.
  1018:   282.   419.   549.   714.   810.   774.   780.   571.   388.
  1027:   278.   186.   174.   156.   146.   147.   149.   109.   163.

  1117:   295.   333.   357.   381.   377.   408.   601.  1174.  3247.
  1126:  8548. 17465. 26219. 29738. 22421. 10725.  3128.   566.   138.
  1135:    73.    85.    71.    63.    56.    63.    58.    63.    62.

  1301:    26.    29.    17.    22.    18.    31.    23.    26.    25.
  1310:    25.    32.    33.    27.    33.    36.    24.    24.    27.
  1319:    25.    32.    27.    22.    34.    21.    18.    21.    27.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA      BKGND   FWHM  CHANNEL LEFT PW  CTS/SEC   %ERR

  1  1  511.08    4267.     3366.   2.98  1022.57 1011  22 7.111E 00   2.5
  2  1  564.19  121513.     3924.   1.95  1128.70 1120  18 2.025E 02   0.3
  3  1  602.85    3418.      952.   2.02  1205.97 1198  22 5.696E 00   2.1
  4  1  646.21     228.      321.   2.33  1292.62 1288  12 3.800E-01  12.9
```

```
***********************************************************************
******************* 8 JAN 1980  5:30:52 PM  ***************************
***********************************************************************

9111.9065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q339C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   10783.00         UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2127:36 * FWHM(1332)           2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:         5.000
ELAPSED REAL TIME:       613. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                    *
***********************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                    *
***********************************************************************


UNKNOWN SAMPLE REPORT

                    PEAK                                   1 SIGMA
ELEMENT            ENERGY    BKGND       AREA      CONCENTR.   ERROR      %ERROR
------------------------------------------------------------------------------

%-COPPER           511.1     2361.       3647.     0.0225     0.0007        2.9
%-ANTIMONY         564.2     2934.     100369.     0.7357     0.0031        0.4
%-ARSENIC          657.4      279.        0.  <    0.0033    NOT DETECTABLE

  1009:   148.    106.    149.    152.    114.    147.    149.    161.    175.
  1018:   239.    344.    508.    553.    696.    747.    652.    431.    339.
  1027:   214.    175.    128.    114.    122.    109.    122.    127.    125.

  1117:   234.    263.    268.    283.    342.    373.    483.   1005.   2672.
  1126:  6934.  14420.  21681.  24415.  18480.   8948.   2491.    465.     88.
  1135:    63.     58.     63.     43.     55.     45.     51.     46.     38.

  1301:    25.     26.     20.     27.     25.     21.     20.     26.     20.
  1310:    23.     18.     27.     16.     27.     19.     24.     22.     26.
  1319:    24.     17.     16.     19.     21.     22.     22.     15.     27.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =   1.000

  PK IT   ENERGY      AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

   1  1   511.06     3647.      2361.    2.85   1022.54 1013   19 6.078E 00   2.5
   2  1   564.19   100369.      2934.    1.95   1128.70 1119   18 1.673E 02   0.3
   3  1   602.85     2811.       466.    1.96   1205.96 1195   19 4.685E 00   2.2
   4  1   645.90      248.       261.    2.37   1292.00 1287   12 4.132E-01  11.2
```

```
********************************************************************
****************** 8 J    1980  5:32:05 PM  ***** ***********
********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q340A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9980.000       UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2138:01 * FWHM(1332)       2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:      610. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                    *
*********************************************************************
                                    *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                    *
*********************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                  1 SIGMA
ELEMENT        ENERGY    BKGND     AREA    CONCENTR.    ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER       511.1    1415.     823.     0.0055     0.0004       7.5
 %-ANTIMONY    564.2     456.   74248.     0.5891     0.0027       0.5
 %-ARSENIC     657.4     238.     185.     0.0084     0.0012      14.1

  1009:   93.    86.    98.    95.    76.   100.   100.    83.   112.
  1018:  106.   143.   164.   175.   180.   208.   179.   169.   101.
  1027:   89.    79.    84.    78.    75.    80.    83.    77.    82.

  1117:  313.   452.   477.   477.   338.   322.   355.   656.  1856.
  1126: 5126. 10707. 15981. 17903. 13789.  6480.  1876.   313.    49.
  1135:   49.    32.    32.    30.    29.    23.    35.    28.    18.

  1301:   25.    10.    15.    13.     4.    11.    16.    10.    10.
  1310:   11.    23.    23.    24.    30.    55.    49.    23.    21.
  1319:   11.    22.    19.    16.    13.    14.    20.    10.    14.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL  LEFT  PW   CTS/SEC    %ERR

  1  1  511.10     823.    1415.    3.40  1022.60 1013   17 1.371E 00    7.3
  2  6  559.92    2716.    1041.    3.54  1120.17 1109   36 4.527E 00    2.6
  3  6  564.19   74248.     456.    1.95  1128.70 1109   36 1.237E 02    0.4
  4  1  602.88    2091.     449.    2.05  1206.03 1194   23 3.485E 00    2.6
  5  1  645.93     123.     231.    2.04  1292.06 1287   12 2.049E-01   19.7
  6  1  657.39     185.     238.    2.31  1314.96 1308   19 3.084E-01   13.9
```

```
*****************************************************************************
******************** 8 JAN 1980  5:33:15 PM  *****************************
*****************************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q340B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    13486.00           UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  FFF.TAB1
*****************************************************************************
                                       *
ACQUISITION DATE:  7JAN80 2148:23 * FWHM(1332)           2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:         5.000
ELAPSED REAL TIME:        614. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                       *
*****************************************************************************
                                       *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803          * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV      * ABUNDANCE LIMIT:   85.00%
                                       *
*****************************************************************************


UNKNOWN SAMPLE REPORT

                   PEAK                                    1 SIGMA
ELEMENT            ENERGY    BKGND      AREA     CONCENTR.   ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER           510.9     2299.     1158.     0.0058    0.0004        6.7
 %-ANTIMONY        564.2      658.   103271.     0.6075    0.0025        0.4
 %-ARSENIC         657.2      344.      225.     0.0076    0.0010       13.7

  1009:   133.   138.   133.   108.   142.   151.   133.   160.   137.
  1018:   158.   200.   242.   317.   290.   270.   280.   213.   178.
  1027:   155.   131.   127.   120.   123.   125.   109.   124.   118.

  1117:   445.   674.   698.   609.   492.   378.   542.   982.  2779.
  1126:  7092. 14599. 22288. 25007. 19206.  9055.  2648.   474.    97.
  1135:    56.    59.    49.    49.    52.    60.    47.    50.    46.

  1301:    32.    26.    25.    15.    22.    19.    22.    32.    14.
  1310:    32.    29.    33.    60.    67.    69.    58.    36.    30.
  1319:    17.    24.     9.    28.    24.    22.    15.    20.    14.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1. 510.86    1158.     2299.    2.91  1022.13 1012   19 1.929E 00    6.6
  2  6. 560.01    3683.     1565.    3.54  1120.36 1110   30 6.138E 00    2.2
  3  6. 564.19  103271.      658.    1.95  1128.71 1110   30 1.721E 02    0.3
  4  1. 602.92    2800.      488.    2.03  1206.12 1198   16 4.666E 00    2.2
  5  1. 646.02     186.      392.    1.99  1292.24 1284   14 3.099E-01   16.8
  6  1. 657.18     225.      344.    2.13  1314.55 1309   17 3.754E-01   13.4
```

```
***************************************************************************
********************      8 J** 1980  5:34:24 PM   *****************
***************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   0340C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   10947.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***************************************************************************
                                   *
ACQUISITION DATE:  7JAN80 2158:50  * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                   *
***************************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                   *
***************************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                  1 SIGMA
ELEMENT          ENERGY    BKGND       AREA    CONCENTR.   ERROR      %ERROR
---------------------------------------------------------------------------

%-COPPER         511.2    1717.        817.    0.0051     0.0004        8.1
%-ANTIMONY       564.2     442.      89829.    0.6521     0.0028        0.4
%-ARSENIC        657.0     210.        209.    0.0087     0.0011       12.3

  1009:  113.    126.    100.    118.    115.    116.    116.    111.    89.
  1018:  136.    138.    176.    192.    254.    233.    221.    193.   151.
  1027:  132.    124.     99.    113.    110.     87.     90.     95.   114.

  1117:  390.    545.    667.    593.    417.    358.    412.    862.  2323.
  1126: 6221.  12795.  19485.  21424.  16496.  8023.   2240.    402.    87.
  1135:   48.     44.     36.     42.     41.     51.     33.     42.    36.

  1301:   17.     26.     20.     14.     25.     20.     16.     21.    19.
  1310:   17.     25.     38.     55.     64.     62.     48.     17.    22.
  1319:   16.     17.     19.     14.     19.     17.     15.     19.    16.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.22      817.     1717.    2.73  1022.85 1016   17 1.362E 00   8.0
  2  6  559.59     3491.      948.    3.14  1119.52 1107   31 5.818E 00   2.1
  3  6  564.18    89829.      442.    1.96  1128.70 1107   31 1.497E 02   0.3
  4  1  602.87     2565.      370.    1.97  1206.00 1194   20 4.274E 00   2.2
  5  1  645.97      181.      260.    1.99  1292.15 1286   13 3.023E-01  14.6
  6  1  657.05      209.      210.    2.03  1314.28 1308   12 3.476E-01  12.0
```

```
************************************************************************
****************** 8 [●] 1980  5:35:35 PM  ***** [●] **********
************************************************************************


91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q358A
TYPE OF SAMPLE:  UNKNOWN                   .
SAMPLE QUANTITY:   11667.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*******************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1234:19  * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:       608. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC  * NBR ITERATIONS:   10.
                                   *
*******************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803          * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                                   *
*******************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
------------------------------------------------------------------------

%-COPPER         511.1     1259.      1393.    0.0180    0.0009       4.7
%-ANTIMONY       564.2      262.     59979.    0.4770    0.0023       0.5
%-ARSENIC        657.4      183.        0. <   0.0038    NOT DETECTABLE

  1009:   81.     78.     92.     76.     86.     74.     72.     73.     76.
  1018:  100.    156.    194.    224.    304.    294.    278.    195.    158.
  1027:   90.     88.     75.     69.     70.     65.     57.     62.     71.

  1117:  211.    210.    238.    243.    207.    208.    303.    508.   1541.
  1126: 4129.   8241.  12507.  14409.  11273.   5466.   1683.    275.     56.
  1135:   37.     22.     21.     18.     23.     23.     18.     27.     20.

  1301:   13.     15.     10.     13.      5.      9.     10.     14.      7.
  1310:   11.     16.     13.     13.     22.     19.     17.     20.     11.
  1319:   10.     11.     13.     10.     11.      8.      9.      8.      7.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC     %ERR

  1  1  511.12     1393.     1259.    2.82   1022.65 1015   19 2.322E 00    4.5
  2  2  561.79      953.      405.    2.42   1123.91 1107   31 1.588E 00    4.4
  3  2  564.21    59979.      262.    1.98   1128.75 1107   31 9.997E 01    0.4
  4  1  602.83     2021.      234.    2.10   1205.92 1197   17 3.368E 00    2.5
  5  1  646.29      171.      156.    2.94   1292.78 1285   16 2.853E-01   12.8
```

91119065 RF LEAD

SAMPLE DATE: 7JAN80 1153:00
SAMPLE IDENTIFICATION: Q358B
TYPE OF SAMPLE: UNKNOWN
SAMPLE QUANTITY: 11868.00   UNITS: UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME: FFF.TAB1
```
*********************************************************************
                                     *
ACQUISITION DATE:  8JAN80 1244:41. * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:        608. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                     *
*********************************************************************
                                     *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803          * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV       * ABUNDANCE LIMIT:  85.00%
                                     *
*********************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.1	1509.	1339.	0.0172	0.0009	5.1
%-ANTIMONY	564.2	367.	62272.	0.4878	0.0023	0.5
%-ARSENIC	657.4	210.	0. <	0.0040	NOT DETECTABLE	

```
1009:  76.   78.   78.   85.   94.   94.   71.   81.   98.
1018: 153.  166.  203.  274.  318.  337.  259.  223.  167.
1027: 108.   85.   71.   82.   85.   66.   85.   83.   72.

1117: 168.  221.  228.  243.  219.  245.  329.  551. 1626.
1126: 4187. 8792. 13201. 15241. 11722. 5710. 1675.  338.   57.
1135:  34.   31.   23.   31.   27.   24.   30.   16.   23.

1301:  16.   16.   15.   19.   17.   18.   12.   17.    9.
1310:   9.   14.   15.   25.   22.   20.   19.   20.    9.
1319:  17.   11.   20.   16.    7.    8.   13.   17.    9.
```
          PULSE-PILE-UP CORRECTED DATA. CORRECTION = 1.000

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.08	1339.	1509.	2.66	1022.58	1014	17	2.231E 00	4.9
2	3	562.27	785.	430.	1.97	1124.88	1111	28	1.309E 00	5.2
3	3	564.21	62272.	367.	1.94	1128.75	1111	28	1.038E 02	0.4
4	1	602.82	2122.	391.	1.93	1205.91	1194	22	3.537E 00	2.5
5	1	645.95	133.	462.	1.96	1292.11	1288	26	2.211E-01	24.5

```
******************************************************************
****************** 8 JAN 1980  5:37:55 PM  *****************
******************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q358C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    13447.00       UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
****************************************************************
                              *
ACQUISITION DATE:  8JAN80 1255:02 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                              *
****************************************************************
                              *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                              *
****************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                1 SIGMA
ELEMENT        ENERGY    BKGND     AREA     CONCENTR.   ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER       511.2     1656.     1817.    0.0208    0.0009        4.2
%-ANTIMONY     564.2      420.    75021.    0.5196    0.0023        0.4
%-ARSENIC      657.4      236.       0. <   0.0037    NOT DETECTABLE

 1009:  102.    86.    116.    96.    91.    94.   113.   104.   118.
 1018:  147.   195.   259.   303.   370.   368.   319.   312.   162.
 1027:  157.   104.    94.    82.    92.    91.    79.    89.    84.

 1117:  198.   267.   315.   301.   283.   263.   394.   699.  2002.
 1126: 5090. 10556. 16062. 18168. 14008.  6790.  2027.   333.    72.
 1135:   42.    38.    31.    33.    29.    25.    32.    31.    31.

 1301:   17.    24.    13.    16.    20.    16.    12.    19.    16.
 1310:   17.    23.    13.    23.    24.    25.    25.    18.    18.
 1319:   12.     9.    13.    13.    17.    13.    11.    14.    18.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW  CTS/SEC    %ERR

  1  1. 511.16    1817.    1656.    3.07  1022.72 101.4  18 3.029E 00   3.9
  2  6. 561.50    1421.     411.    1.63  1123.33 1107   43 2.369E 00   3.3
  3  6. 564.20   75021.     420.    1.95  1128.73 1107   43 1.250E 02   0.4
  4  1. 602.84    2418.     462.    1.99  1205.96 1196   24 4.029E 00   2.4
  5  1. 646.12     187.     183.    2.66  1292.44 1287   12 3.121E-01  12.6
```

```
*********************************************************************
****************** 8 ___ 1980  5:39:03 PM  ***** _ **********
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q359A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    12453.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                *
ACQUISITION DATE:  7JAN80 2240:26 * FWHM(1332)       2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:     5.000
ELAPSED REAL TIME:        611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:  10.
                                *
*********************************************************************
                                *
DETECTOR: GELI-8                * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                *
*********************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                              1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER         511.1     2048.     3568.    0.0204     0.0006       2.9
%-ANTIMONY       564.2      583.    77014.    0.4951     0.0022       0.4
%-ARSENIC        657.3      293.       88.    0.0033     0.0010      29.6

 1009:  102.   105.   109.   101.    88.   105.   110.   145.   173.
 1018:  211.   318.   397.   574.   626.   672.   509.   444.   352.
 1027:  196.   136.   116.    90.    96.    80.   100.    93.    91.

 1117:  331.   393.   454.   379.   312.   295.   394.   703.  1956.
 1126: 5223. 10565. 16838. 18769. 14307.  7046.  1963.   341.    64.
 1135:   42.    35.    48.    44.    34.    37.    40.    30.    39.

 1301:   22.    18.    14.    23.    13.    14.    12.    23.    22.
 1310:   23.    20.    19.    34.    40.    47.    29.    30.    27.
 1319:   19.    24.    27.    16.    22.    25.    20.    22.    20.
           PULSE-PILE-UP CORRECTED DATA  CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.09    3568.    2048.    3.07  1022.59 1011   21 5.947E 00   2.5
  2  3  561.07    1665.     925.    2.64  1122.48 1111   48 2.775E 00   3.6
  3  3  564.20   77014.     583.    1.94  1128.72 1111   48 1.284E 02   0.4
  4  1  602.86    2210.     383.    1.98  1205.99 1197   17 3.684E 00   2.5
  5  1  645.90     159.     254.    2.18  1292.01 1286   13 2.648E-01  16.2
  6  1  657.26      88.     293.    1.87  1314.70 1311   13 1.467E-01  29.5
```

```
*********************************************************************
****************** 8 J██ 1980  5:40:15 PM  *****██***********
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q359B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    12274.00         UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*******************************************************************
                                          *
ACQUISITION DATE:  7JAN80 2250:49 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                          *
*******************************************************************
                                          *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                          *
*******************************************************************


UNKNOWN SAMPLE REPORT


                   PEAK                                   1 SIGMA
ELEMENT           ENERGY     BKGND       AREA     CONCENTR.   ERROR      %ERROR
--------------------------------------------------------------------------------

%-COPPER          511.0      2068.       3767.     0.0221     0.0006       2.8
 %-ANTIMONY       564.2       400.      78273.     0.5115     0.0023       0.4
 %-ARSENIC        657.5       294.         53. <   0.0031     NOT DETECTABLE

  1009:    92.   100.   100.    95.   104.   107.    96.   137.   155.
  1018:   213.   313.   475.   606.   695.   652.   593.   464.   309.
  1027:   186.   142.   128.   125.    93.    83.    93.    99.    83.

  1117:   282.   404.   450.   420.   317.   293.   391.   731.  1995.
  1126:  5387. 11006. 16895. 18802. 14518.  7010.  1991.   357.    76.
  1135:    41.    26.    42.    40.    26.    38.    22.    28.    33.

  1301:    16.    23.    20.    21.    10.    18.    13.    27.    15.
  1310:    17.    15.    32.    32.    43.    47.    43.    28.    24.
  1319:    10.    17.    14.    17.    14.    17.    15.    18.    24.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT   ENERGY    AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC     %ERR

  1  1   511.02    3767.     2068.    2.97  1022.46 1011   22 6.278E 00   2.4
  2  3   560.56    1733.      620.    2.44  1121.45 1107   31 2.889E 00   3.1
  3  3   564.19   78273.      400.    1.95  1128.71 1107   31 1.305E 02   0.4
  4  1   602.89    2172.      475.    2.00  1206.04 1197   20 3.619E 00   2.6
  5  1   645.97     125.      992.    2.09  1292.15 1284   31 2.089E-01  36.6
  6  1   657.49      53.      294.    2.35  1315.17 1314   11 8.898E-02  47.5
```

```
************************************************************
*****************   8 JAN 1980  5:41:26 PM   ***************
************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q359C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    12112.00         UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
******************************************************************
                               *
ACQUISITION DATE:  7JAN80 2301:12 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                               *
******************************************************************
                               *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                               *
******************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                    1 SIGMA
ELEMENT         ENERGY      BKGND       AREA       CONCENTR.      ERROR        %ERROR
-----------------------------------------------------------------------------------------

%-COPPER        511.0       2394.       4050.      0.0242        0.0007        2.7
 %-ANTIMONY     564.2       463.       80850.      0.5364        0.0024        0.4
 %-ARSENIC      657.1       220.        252.       0.0097        0.0010       10.8

  1009:    99.    106.    108.    115.    118.    123.    142.    134.    175.
  1018:   234.    317.    507.    673.    770.    731.    656.    478.    339.
  1027:   184.    161.    140.    113.    101.     92.     72.     95.     90.

  1117:   306.    448.    480.    401.    345.    315.    384.    727.   1967.
  1126:  5372. 11280.  17458.  19579.  15018.   7411.   2179.    386.     74.
  1135:    51.     49.     33.     29.     32.     36.     44.     35.     31.

  1301:    15.     16.     23.     16.     13.     12.     11.     17.     15.
  1310:    19.     19.     34.     33.     47.     36.     38.     27.     27.
  1319:    21.     21.     15.     22.     21.     23.     12.     13.      8.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.03    4050.     2394.    2.84   1022.46 1011   24 6.749E 00   2.3
  2  2  560.38    1702.      727.    2.40   1121.10 1108   33 2.836E 00   3.3
  3  2  564.20   80850.      463.    1.95   1128.73 1108   33 1.347E 02   0.4
  4  1  602.85    2295.      375.    1.98   1205.97 1198   15 3.825E 00   2.4
  5  1  646.04     159.      296.    2.13   1292.28 1283   15 2.644E-01  17.3
  6  1  657.05     252.      220.    4.02   1314.29 1307   20 4.192E-01  10.5
```

```
*****************************************************************
********************  8 JAN 1980  5:42:37 PM   ******************
*****************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q360A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   10138.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2311:38 * FWHM(1332)          2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:       609. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                    *
*************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                    *
*************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                  1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.  ERROR      %ERROR
---------------------------------------------------------------------------

%-COPPER         511.1     2087.     2248.    0.0162    0.0006      3.8
%-ANTIMONY       564.2      346.    66338.    0.5268    0.0025      0.5
%-ARSENIC        657.3      280.      136.    0.0063    0.0012     19.6

 1009:    78.     88.     88.     88.    105.     90.    105.    100.    132.
 1018:   152.    221.    318.    351.    476.    443.    408.    337.    195.
 1027:   155.    115.     98.     73.     80.     91.     72.     78.     65.

 1117:   208.    259.    278.    275.    244.    266.    344.    626.   1659.
 1126:  4497.   9120.  14083.  16111.  12508.   5957.   1681.    311.     55.
 1135:    33.     28.     27.     27.     36.     23.     29.     28.     28.

 1301:    12.     19.     17.     11.     15.     12.     24.     13.     14.
 1310:    14.     16.     16.     29.     28.     37.     24.     15.     23.
 1319:    13.     13.     14.     12.      8.     13.     13.     10.     10.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.09     2248.     2087.    2.85  1022.60 1014  23 3.747E 00   3.6
  2  2  559.93      931.      570.    2.17  1120.19 1110  27 1.551E 00   4.9
  3  2  564.21    66338.      346.    1.95  1128.74 1110  27 1.106E 02   0.4
  4  1  602.86     1939.      304.    1.96  1205.99 1198  16 3.232E 00   2.6
  5  1  645.82      136.      146.    2.28  1291.84 1287  11 2.269E-01  15.2
  6  1  657.33      136.      280.    3.23  1314.85 1303  20 2.269E-01  19.4
```

```
*********************************************************************
*******************  8 JAN 1980  5:43:48 PM  ***********************
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q360B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:     12238.00        UNITS:  UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*****************************************************************
                                      *
ACQUISITION DATE:  7JAN80 2322:00 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:       612. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC  * NBR ITERATIONS:   10.
                                      *
*****************************************************************
                                      *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:       0.5003803           * HALF LIFE RATIO:    8.00
OFFSET:        -0.5932283 KEV       * ABUNDANCE LIMIT:   85.00%
                                      *
*****************************************************************


UNKNOWN SAMPLE REPORT

                    PEAK                                   1 SIGMA
ELEMENT            ENERGY    BKGND      AREA     CONCENTR.   ERROR       %ERROR
-------------------------------------------------------------------------------

%-COPPER           511.1     2532.     2926.     0.0177     0.0006       3.4
%-ANTIMONY         564.2      439.    83429.     0.5498     0.0024       0.4
%-ARSENIC          657.5      383.       88. <   0.0036     NOT DETECTABLE

  1009:   116.   107.   118.   1.04.  123.   132.   105.   144.   166.
  1018:   219.   280.   373.   465.   605.   587.   522.   399.   225.
  1027:   177.   142.   106.   113.   109.   114.    99.    88.    95.

  1117:   260.   335.   403.   417.   315.   319.   380.   763.  2227.
  1126:  5622. 11714. 17905. 20104. 15465.  7468.  2229.   415.    69.
  1135:    53.    36.    39.    38.    51.    38.    28.    41.    47.

  1301:    21.    19.    28.    22.    22.    17.    28.    11.    15.
  1310:    14.    18.    23.    29.    32.    37.    42.    20.    19.
  1319:    14.    14.    15.    18.    22.    19.    21.    16.    17.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.06    2926.    2532.   2.82  1022.52 1012  24 4.877E 00   3.1
  2  2  561.43    1614.     698.   2.41  1123.20 1108  29 2.689E 00   3.4
  3  2  564.19   83429.     439.   1.96  1128.72 1108  29 1.390E 02   0.3
  4  1  602.81    2424.     552.   2.00  1205.89 1195  24 4.041E 00   2.5
  5  1  646.10     205.     328.   2.77  1292.40 1284  16 3.411E-01  14.3
  6  1  657.48      88.     383.   2.33  1315.15 1307  18 1.467E-01  33.2
```

```
********************************************************************
******************* 8 JUN 1980  5:44:55 PM  *********************
********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 11:53:00
SAMPLE IDENTIFICATION:  0360C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9200.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
********************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2332:27 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       608. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                    *
********************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                    *
********************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                              1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
--------------------------------------------------------------------------

%-COPPER         511.0    1750.      2237.    0.0181      0.0007      3.7
 %-ANTIMONY      564.2     351.     64127.    0.5632      0.0027      0.5
 %-ARSENIC       657.4     274.        0. <   0.0041      NOT DETECTABLE

 1009:    91.    94.    79.    84.    85.   101.    82.   101.   129.
 1018:   163.   230.   321.   378.   423.   451.   409.   277.   207.
 1027:   135.   124.    79.    79.    70.    88.    93.    75.    80.

 1117:   201.   294.   271.   264.   251.   235.   336.   565.  1620.
 1126:  4245.  8939. 13758. 15552. 11985.  5794.  1662.   305.    61.
 1135:    34.    24.    25.    34.    29.    30.    24.    13.    18.

 1301:    21.    23.    28.    18.    17.    15.    14.    12.    10.
 1310:    18.    25.    29.    23.    28.    31.    34.    15.    17.
 1319:    16.    17.    11.    19.    12.     9.    15.    17.    16.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

 1  1  511.01     2237.     1750.    2.92  1022.43 1013   20 3.729E 00   3.4
 2  2  564.20    64127.      351.    1.95  1128.73 1113   24 1.069E 02   0.4
 3  2  581.09     1186.      -40.    2.38  1162.49 1113   24 1.977E 00   2.8
 4  1  602.83     1839.      374.    2.02  1205.93 1197   17 3.064E 00   2.8
 5  1  649.96      196.      560.   12.82  1300.12 1285   35 3.267E-01  18.5
```

```
**************************************************************
*****************   8 JAN 1980  5:46:09 PM   *****************
**************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   0361A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    12504.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************
                                  *
ACQUISITION DATE:  8JAN80 1305:24 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        609. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                  *
*********************************************************
                                  *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:          0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                  *
*********************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                1 SIGMA
ELEMENT           ENERGY    BKGND     AREA    CONCENTR.   ERROR      %ERROR
--------------------------------------------------------------------------

%-COPPER          511.0     2076.     1784.    0.0222    0.0010       4.6
%-ANTIMONY        564.2      346.    67469.    0.5034    0.0023       0.5
%-ARSENIC         657.4      276.       0. <   0.0043    NOT DETECTABLE

  1009:     91.    79.     83.    99.    88.    96.    90.   108.   112.
  1018:    132.   209.    245.   335.   387.   379.   324.   247.   193.
  1027:    124.   118.    113.    67.    92.    74.    91.    80.    60.

  1117:    240.   306.    340.   319.   253.   251.   332.   638.  1704.
  1126:   4534.  9340.  14269. 16399. 12610.  6178.  1806.   296.    67.
  1135:     50.    29.     29.    32.    27.    27.    28.    26.    32.

  1301:     22.    14.     17.    13.    13.    13.    15.    18.     6.
  1310:     19.    17.     16.    27.    37.    36.    34.    19.    23.
  1319:     11.    14.     17.    17.    13.    13.    15.    16.    11.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

 1  1  511.02    1784.    2076.   2.84  1022.45 1013  24 2.973E 00   4.3
 2  2  564.21   67469.     346.   1.96  1128.74 1107  34 1.124E 02   0.4
 3  2  589.03    1468.     -31.   2.40  1178.35 1107  34 2.446E 00   2.6
 4  1  602.82    2297.     281.   2.08  1205.91 1197  17 3.828E 00   2.3
 5  1  646.14     104.     910.   2.37  1292.48 1281  34 1.731E-01  42.2
```

```
***************************************************************
****************   8 JAN 1980  5:47:21 PM   *****************
***************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q361B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    9414.000         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***************************************************************
                                  *
ACQUISITION DATE:  8JAN80 1315:46 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       608. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                  *
***************************************************************
                                  *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                  *
***************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                              1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER         511.1     1827.     1362.    0.0227     0.0012        5.4
%-ANTIMONY       564.2      303.    54051.    0.5367     0.0027        0.5
%-ARSENIC        657.4      240.       0. <   0.0054     NOT DETECTABLE

 1009:    80.     70.     66.     65.     82.     86.     60.     83.     98.
 1018:   115.    147.    199.    248.    271.    223.    259.    205.    158.
 1027:   112.     72.     71.     69.     68.     63.     59.     55.     64.

 1117:   211.    262.    281.    271.    207.    200.    259.    468.   1404.
 1126:  3619.   7585.  11576.  12911.  10116.   4914.   1462.    271.     52.
 1135:    25.     23.     27.     29.     26.     24.     28.     23.     20.

 1301:    14.     16.     11.     15.     16.     10.      9.     14.     14.
 1310:    11.     21.     22.     30.     26.     28.     25.     12.     15.
 1319:    10.     14.     12.     10.      8.     14.      5.     10.     11.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT   ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1   511.09     1362.      1827.   3.21   1022.58 1015   28 2.270E 00    5.2
  2  3   560.32     1017.       525.   2.43   1120.98 1111   26 1.695E 00    4.5
  3  3   564.20    54051.       303.   1.96   1128.73 1111   26 9.009E 01    0.4
  4  1   602.87     1903.       225.   2.06   1206.00 1196   18 3.172E 00    2.5
  5  1   645.96      120.       570.   2.37   1292.13 1284   30 1.993E-01   29.7
```

```
************************************************************
*****************  8 JAN 1980  5:48:28 PM  *****************
************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q361C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    12549.00        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*****************************************************************
                              *
ACQUISITION DATE:   8JAN80 1326:09 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                              *
*****************************************************************
                              *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                              *
*****************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                                  1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.  ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER         511.2     1724.     1816.     0.0229    0.0010      4.3
%-ANTIMONY       564.2      615.    73449.     0.5481    0.0025      0.5
%-ARSENIC        657.4      272.        0. <   0.0043    NOT DETECTABLE

  1009:   100.     93.    118.     99.     98.    109.     99.    117.    117.
  1018:   162.    194.    248.    324.    336.    400.    346.    298.    186.
  1027:   153.    114.     81.    103.     78.     88.    102.     78.     91.

  1117:   244.    330.    354.    353.    294.    286.    357.    672.   1898.
  1126:  4964.  10469.  15908.  17538.  13564.   6721.   1935.    330.     63.
  1135:    32.     35.     40.     27.     28.     32.     35.     18.     34.

  1301:    18.     14.     20.     16.      9.     17.     22.     12.     16.
  1310:     8.     17.     27.     30.     32.     33.     26.     25.     19.
  1319:    11.     15.     13.     11.     22.     16.     13.     21.     16.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =   1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.18    1816.    1724.    2.93  1022.78 1013   19 3.026E 00   4.0
  2  2  561.33    1255.     873.    2.42  1122.99 1112   50 2.092E 00   4.4
  3  2  564.19   73449.     615.    1.96  1128.71 1112   50 1.224E 02   0.4
  4  1  602.87    2353.     466.    1.95  1206.01 1196   19 3.922E 00   2.4
  5  1  646.06     156.     344.    1.93  1292.32 1281   17 2.595E-01  18.7
```

```
**************************************************************************
*******************  8 JAN 1980  5:49:39 PM  **********************
**************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q362A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11345.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
**********************************************************************
                                     *
ACQUISITION DATE:  8JAN80 1336:31 * FWHM(1332)          2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:       610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                     *
**********************************************************************
                                     *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                     *
**********************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                               1 SIGMA
ELEMENT          ENERGY    BKGND      AREA     CONCENTR.    ERROR      %ERROR
-------------------------------------------------------------------------------

%-COPPER         511.1     2451.      3987.     0.0561     0.0016       2.8
%-ANTIMONY       564.2     2140.     78423.     0.6485     0.0029       0.4
%-ARSENIC        657.4      225.       0. <     0.0044     NOT DETECTABLE

 1009:  118.   105.   106.    96.   103.    97.   121.   133.   165.
 1018:  236.   319.   444.   677.   747.   741.   646.   470.   346.
 1027:  200.   146.   122.    93.    95.    88.    89.    94.    97.

 1117:  165.   176.   203.   196.   249.   311.   412.   725.  2031.
 1126: 5358. 11085. 16724. 18869. 14664.  7072.  2088.   386.    75.
 1135:   42.    41.    43.    44.    32.    25.    24.    25.    27.

 1301:   15.    16.    13.    16.    14.    16.    15.    19.    14.
 1310:   15.    16.    17.    23.    29.    13.    22.    20.    15.
 1319:   11.    17.    13.     9.    19.    13.    13.    15.    14.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.06    3987.    2451.    2.81  1022.53 1011   26 6.645E 00   2.4
 2  1  564.20   78423.    2140.    1.96  1128.73 1118   20 1.307E 02   0.4
 3  1  602.83    2494.     483.    1.94  1205.92 1196   21 4.157E 00   2.4
 4  1  645.99     217.     186.    2.17  1292.19 1285   14 3.618E-01  11.2
```

```
******************************************************************
****************** 8 JAN 1980  5:50:47 PM  *****************
******************************************************************

911.19065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q362B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    14529.00          UNITS:   UG         .
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                    *
ACQUISITION DATE:  8JAN80 1346:53 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                    *
*****************************************************************
                                    *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803          * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                                    *
*****************************************************************


UNKNOWN SAMPLE REPORT

                   PEAK                                  1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER          511.1    2265.     5056.    0.0561     0.0014       2.4
%-ANTIMONY        564.2    2289.    93910.    0.6075     0.0026       0.4
%-ARSENIC         657.4     228.       0.  <  0.0035     NOT DETECTABLE

  1009:   148.   137.   123.   142.   107.   129.   147.   159.   212.
  1018:   289.   409.   582.   784.   897.   937.   822.   610.   416.
  1027:   259.   178.   136.   121.   104.    84.   105.   110.   113.

  1117:   168.   194.   221.   279.   276.   289.   466.   853.  2474.
  1126:  6489. 13083. 20017. 22568. 17559.  8510.  2473.   468.   105.
  1135:    51.    41.    40.    35.    39.    39.    45.    36.    33.

  1301:    13.    13.    20.    16.    23.    21.    17.    21.    22.
  1310:    12.    10.    16.    20.    17.    27.    12.    23.    27.
  1319:    15.     7.    20.    16.    14.    17.    26.    17.    22.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.10     5056.    2265.    2.89  1022.60 1012   20 8.426E 00   1.9
  2  1  564.20    93910.    2289.    1.97  1128.73 1118   21 1.565E 02   0.3
  3  1  602.83     3071.     486.    2.00  1205.94 1196   18 5.119E 00   2.1
  4  1  646.01      285.     230.    2.12  1292.23 1285   17 4.748E-01   9.6
```

```
****************************************************************
****************  8 JAN 1980  5:51:52 PM  *******************
****************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q362C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   13393.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                               *
ACQUISITION DATE:  8JAN80   34:51 * FWHM(1332)          2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:       617. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                               *
*****************************************************************
                               *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                               *
*****************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                                1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
--------------------------------------------------------------------------

%-COPPER        511.1     3738.    11683.    0.0688     0.0013       1.9
%-ANTIMONY      564.2     3458.   123070.    0.7507     0.0029       0.4
%-ARSENIC       657.4      363.       0. <   0.0033     NOT DETECTABLE

  1009:   171.   184.    163.    186.    189.    210.    208.    251.    366.
  1018:   539.   833.   1246.   1695.   2008.   2014.   1806.   1328.    855.
  1027:   530.   329.    236.    213.    171.    140.    155.    133.    143.

  1117:   263.   300.    304.    346.    363.    407.    579.   1167.   3238.
  1126:  8352. 17232.  26387.  29748.  22986.  11314.   3421.    647.    135.
  1135:    81.    81.     65.     59.     54.     64.     50.     62.     58.

  1301:    33.    25.     34.     29.     18.     23.     21.     27.     34.
  1310:    25.    26.     24.     35.     39.     25.     31.     25.     26.
  1319:    23.    27.     23.     17.     30.     25.     33.     26.     28.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.09   11683.     3738.   2.89  1022.59 1011   24 1.947E 01   1.2
  2  1  564.20  123070.     3458.   1.96  1128.73 1119   19 2.051E 02   0.3
  3  1  602.86    3514.      584.   1.91  1205.99 1198   16 5.857E 00   1.9
  4  1  645.82     280.      536.   2.32  1291.84 1283   18 4.660E-01  13.1
```

```
***********************************************************
***************** 8 JAN 1980  5:52:59 PM  *****************
***********************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 11.53:00
SAMPLE IDENTIFICATION:   A/S-1A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    11458.00        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
***********************************************************
                              *
ACQUISITION DATE:   8JAN80 1357:19 * FWHM(1332)       2.390
PRESET TIME(LIVE):      600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:      636. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC * NBR ITERATIONS:   10.
                              *
***********************************************************
                              *
DETECTOR: GELI-8              * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803    * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV * ABUNDANCE LIMIT:   85.00%
                              *
***********************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	4899.	0. <	0.0047	NOT DETECTABLE	
%-ANTIMONY	564.2	2006.	275613.	2.2651	0.0073	0.3
%-ARSENIC	657.1	837.	464.	0.0281	0.0029	10.3

```
1009:  369.   348.   358.   324.   335.   340.   332.   334.   359.
1018:  363.   398.   387.   448.   382.   438.   397.   385.   353.
1027:  346.   309.   324.   325.   356.   291.   354.   325.   324.

1117: 1024.  1262.  1493.  1391.  1145.  1091.  1457.  2855.  7526.
1126:19763. 39517. 59288. 66072. 49778. 24551.  7175.  1498.   395.
1135:  281.   286.   246.   198.   216.   199.   156.   187.   169.

1301:   68.    61.    79.    60.    70.    54.    56.    63.    85.
1310:   75.    81.    80.   123.   166.   139.   135.    93.    58.
1319:   62.    66.    63.    75.    56.    66.    61.    61.    75.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	2	564.18	275613.	2006.	1.97	1128.68	1110	34	4.594E 02	0.2
2	2	564.65	6062.	2513.	2.43	1129.63	1110	34	1.010E 01	1.7
3	1	602.81	8888.	1841.	1.99	1205.88	1196	18	1.481E 01	1.3
4	1	646.04	714.	1080.	2.27	1292.28	1285	16	1.191E 00	7.5
5	1	657.06	464.	837.	2.30	1314.30	1307	14	7.730E-01	10.0

```
*****************************************************************
****************** 8 JAN 1980  5:54:06 PM  ******************
*****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-1B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   10540.00       UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************
                              *
ACQUISITION DATE:  8JAN80   56:12 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       640. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                              *
*********************************************************
                              *
DETECTOR: GELI-8              * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803    * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV * ABUNDANCE LIMIT:  85.00%
                              *
*********************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.1	5502.	1159.	0.0089	0.0009	9.6
%-ANTIMONY	564.2	2298.	318889.	2.4813	0.0078	0.3
%-ARSENIC	657.2	1068.	603.	0.0281	0.0025	9.0

```
1009:  392.  394.  435.  422.  403.  420.  405.  422.  416.
1018:  418.  447.  519.  534.  596.  551.  568.  488.  452.
1027:  427.  373.  387.  358.  368.  396.  355.  343.  354.

1117: 1329. 1681. 1940. 1680. 1384. 1213. 1618. 3138. 8782.
1126:22413.45381.68630.76280.58318.28521. 8325. 1806.  540.
1135:  387.  331.  283.  257.  237.  284.  224.  203.  206.

1301:   84.   85.   87.   89.   80.   94.   72.   98.   77.
1310:   79.  111.  111.  170.  190.  213.  175.  122.  102.
1319:   81.   79.   80.   66.   64.   85.   72.   81.   62.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.11	1159.	5502.	2.87	1022.63	1016	14	1.932E 00	9.5
2	2	560.54	6668.	3434.	2.44	1121.42	1109	35	1.111E 01	1.7
3	2	564.18	318889.	2298.	1.97	1128.69	1109	35	5.315E 02	0.2
4	1	602.84	8960.	2255.	2.01	1205.94	1195	20	1.493E 01	1.3
5	1	645.96	572.	1116.	1.76	1292.13	1287	12	9.527E-01	9.3
6	1	657.24	603.	1068.	2.21	1314.66	1309	14	1.005E 00	8.7

```
****************************************************************
****************    8 JAN 1980   5:55:20 PM    *****************
****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 11:53:00
SAMPLE IDENTIFICATION:   A/S-1C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    10886.00          UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*****************************************************************
                                      *
ACQUISITION DATE:   8JAN80 1408:10 * FWHM(1.332)          2.390
PRESET TIME(LIVE):         600.  SEC * SENSITIVITY:         5.000
ELAPSED REAL TIME:         636.  SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:         600.  SEC * NBR ITERATIONS:     10.
                                      *
*****************************************************************
                                      *
DETECTOR: GELI-8                     * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:    2.000KV
KEV/CHNL:          0.5003803          * HALF LIFE RATIO:     8.00
OFFSET:           -0.5932283 KEV     * ABUNDANCE LIMIT:     85.00%
                                      *
*****************************************************************


UNKNOWN SAMPLE REPORT


                   PEAK                                1 SIGMA
ELEMENT          ENERGY     BKGND       AREA    CONCENTR.   ERROR      %ERROR
------------------------------------------------------------------------------

%-COPPER          511.0      5177.        0.  <   0.0051     NOT DETECTABLE
%-ANTIMONY        564.2      2125.    287541.     2.4920     0.0080        0.3
%-ARSENIC         657.1       699.       425.     0.0272     0.0028       10.4

 1009:   371.    372.    369.    367.    366.    312.    372.    375.    366.
 1018:   363.    408.    394.    425.    428.    476.    445.    401.    390.
 1027:   397.    309.    309.    372.    393.    334.    339.    320.    323.

 1117:   990.   1273.   1441.   1368.   1172.   1142.   1413.   2702.   7456.
 1126:19715.  39447.  60983.  68562.  53920.  26866.   8268.   1719.    450.
 1135:   308.    280.    243.    222.    195.    216.    219.    206.    195.

 1301:    70.     72.     74.     63.     61.     67.     80.     64.     56.
 1310:    72.     74.     92.    125.    167.    176.    117.     91.     57.
 1319:    68.     66.     73.     66.     81.     63.     69.     53.     72.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  2  561.96     5457.     2980.    2.43  1124.24 1110   31 9.095E 00    2.0
  2  2  564.21   287541.     2125.    1.98  1128.75 1110   31 4.792E 02    0.2
  3  1  602.85     9466.     1981.    1.98  1205.97 1195   19 1.578E 01    1.2
  4  1  646.10      755.     1593.    2.34  1292.40 1283   26 1.258E 00    8.3
  5  1  657.10      425.      699.    1.85  1314.38 1309   11 7.075E-01   10.1
```

```
*************************************************************************
******************* 8 JAN 1980  5:56:30 PM  *****************************
*************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-2A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:  9714.000         UNITS:  UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************************
                                  *
ACQUISITION DATE:  8JAN80  118:00 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      634. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                  *
*************************************************************************
                                  *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                  *
*************************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                 1. SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
-------------------------------------------------------------------------

%-COPPER         511.1     4167.      1003.   0.0085    0.0008       9.7
%-ANTIMONY       564.2     1894.    267111.   2.2638    0.0074       0.3
%-ARSENIC        657.2      783.       499.   0.0255    0.0024       9.5

  1009:  360.   351.   324.   328.   321.   329.   325.   321.   317.
  1018:  363.   377.   385.   438.   494.   467.   489.   411.   336.
  1027:  339.   299.   337.   318.   310.   271.   282.   302.   301.

  1117: 1044.  1457.  1574.  1506.  1189.  1030.  1352.  2687.  6978.
  1126:18682. 37747. 57270. 63509. 49372. 24177.  7137.  1406.   410.
  1135:  241.   197.   230.   205.   195.   163.   175.   159.   168.

  1301:   67.    60.    71.    62.    55.    60.    68.    72.    64.
  1310:   65.    69.    95.   131.   173.   182.   133.    81.    86.
  1319:   51.    64.    58.    47.    61.    60.    64.    42.    48.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

 1  1  511.13    1003.    41.67.  2.81  1022.67 1016   13 1.672E 00   9.6
 2  2  560.84    5823.    2737.   2.44  1122.01 1110   28 9.704E 00   1.8
 3  2  564.19  267111.    1894.   1.98  1128.71 1110   28 4.452E 02   0.2
 4  1  602.85    7460.    2464.   1.92  1205.96 1195   22 1.243E 01   1.5
 5  1  645.91     496.    1039.   2.35  1292.02 1284   15 8.260E-01  10.2
 6  1  657.24     499.     783.   2.01  1314.67 1309   13 8.313E-01   9.1
```

```
************************************************************
*******************  8 JAN 1980  5:57:37 PM  ***************
************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-2B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   8796.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************
                              *
ACQUISITION DATE:  8JAN80  128:47 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      631. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                              *
************************************************************
                              *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                              *
************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                              1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
--------------------------------------------------------------------------------

%-COPPER         511.0     4291.      788.     0.0074     0.0009      12.4
%-ANTIMONY       564.2     1546.   250580.     2.3498     0.0077       0.3
%-ARSENIC        657.3      803.      477.     0.0271     0.0027       9.9

1009:  324.   309.   331.   309.   302.   302.   324.   313.   326.
1018:  323.   336.   383.   434.   474.   425.   439.   366.   345.
1027:  297.   285.   297.   292.   285.   306.   290.   280.   268.

1117:  978.  1251.  1420.  1285.  1074.   941.  1206.  2361.  6441.
1126:16966. 34711. 53575. 60202. 46614. 23245.  6901.  1442.   361.
1135:  225.   211.   178.   186.   160.   160.   156.   158.   162.

1301:   62.    71.    50.    70.    61.    52.    61.    57.    67.
1310:   64.    60.    95.   107.   139.   158.   131.   110.    67.
1319:   57.    52.    52.    49.    57.    61.    51.    58.    58.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

 1  1  511.04     788.    4291.   2.29  1022.48 1016  14 1.314E 00  12.3
 2  2  560.89    5219.    2259.   2.43  1122.12 1107  34 8.698E 00   1.9
 3  2  564.20  250580.    1546.   1.97  1128.73 1107  34 4.176E 02   0.2
 4  1  602.85    7381.    1404.   2.03  1205.97 1196  18 1.230E 01   1.4
 5  1  645.99     482.     677.   1.96  1292.18 1287  11 8.037E-01   8.9
 6  1  657.34     477.     803.   2.28  1314.86 1307  15 7.951E-01   9.6
```

```
*********************************************************************
******************* 8 JAN 1980  5:58:45 PM  *******************
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-2C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    12566.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                *
ACQUISITION DATE:  8JAN80  139:33 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       651. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                *
*********************************************************************
                                *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                *
*********************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                  1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR        %ERROR
--------------------------------------------------------------------------------

%-COPPER         511.3     7692.     1510.    0.0101.    0.0009         8.7
%-ANTIMONY       564.2     3246.   389535.    2.5619     0.0078         0.3
%-ARSENIC        657.3     1414.     713.     0.0284     0.0025         8.7

1009:  526.    522.    534.    474.    529.    480.    504.    529.    519.
1018:  543.    540.    600.    657.    721.    693.    705.    618.    574.
1027:  554.    510.    443.    471.    459.    441.    496.    515.    459.

1117: 1570.   2094.   2345.   2047.   1682.   1553.   1923.   3780. 10405.
1126:26666.  54518.  83358.  92476.  72265.  36138.  11366.   2396.   771.
1135:  562.    491.    430.    363.    364.    385.    342.    321.    372.

1301:  110.    123.    107.    103.    114.    116.    105.    109.    117.
1310:  103.    139.    146.    197.    239.    262.    225.    156.    123.
1319:  110.     87.     95.     95.     95.    112.    124.     89.    116.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.29    1510.     7692.    3.00  1022.99 1014   16 2.517E 00   8.6
 2  2  560.49    7863.     4678.    2.45  1121.31 1111   30 1.310E 01   1.7
 3  2  564.20  389535.     3246.    1.98  1128.73 1111   30 6.492E 02   0.2
 4  1  602.86   11176.     3150.    1.99  1205.98 1195   20 1.863E 01   1.2
 5  1  645.98     736.     1684.    2.05  1292.17 1284   14 1.227E 00   8.7
 6  1  657.25     713.     1414.    2.18  1314.69 1308   14 1.188E 00   8.3
```

```
***************************************************************
*****************   8 JAN 1980  5:59:53 PM   ******************
***************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-3A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    11987.00        UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***************************************************************
                              *
ACQUISITION DATE:  8JAN80 1419:00 * FWHM(1332)       2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:      635. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:  10.
                              *
***************************************************************
                              *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:       -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                              *
***************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                1. SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.  ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER        511.0     4854.      0.  <   0.0045    NOT DETECTABLE
%-ANTIMONY      564.2     2040.   276451.  2.1800    0.0070       0.3
%-ARSENIC       657.4      896.      474.  0.0277    0.0029      10.4

 1009:  393.    347.    332.    345.    344.    354.    321.    358.    349.
 1018:  366.    361.    399.    397.    419.    413.    387.    387.    333.
 1027:  360.    325.    331.    297.    317.    289.    325.    312.    310.

 1117:  991.   1256.   1435.   1336.   1160.   1037.   1347.   2631.  7172.
 1126:18907.  37846.  58316.  65714.  51787.  26416.   8066.   1722.   465.
 1135:  319.    229.    214.    220.    212.    189.    175.    169.    171.

 1301:   62.     73.     75.     63.     65.     55.     67.     67.     77.
 1310:   71.     74.     77.    107.    144.    171.    113.    110.     85.
 1319:   55.     77.     48.     56.     67.     55.     71.     70.     69.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

 1  2  561.93    5268.     2871.    2.44  1124.19 1112   36 8.779E 00   2.0
 2  2  564.21  276451.     2040.    1.99  1128.75 1112   36 4.608E 02   0.2
 3  1  602.88    9111.     1582.    2.03  1206.04 1195   19 1.518E 01   1.2
 4  1  646.10     533.     1160.    1.95  1292.40 1285   16 8.888E-01  10.0
 5  1  657.39     474.      896.    2.19  1314.96 1306   16 7.906E-01  10.0
```

```
***************************************************************************
*****************    8 JAN 1980   6:01:00 PM    ***************************
***************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   A/S-3B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   13270.00         UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
***************************************************************      *
                                              *
ACQUISITION DATE:   8JAN80 1429:46  * FWHM(1.332)        2.390
PRESET TIME(LIVE):       600. SEC   * SENSITIVITY:       5.000
ELAPSED REAL TIME:       644. SEC   * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC   * NBR ITERATIONS:   10.
                                              *
***************************************************************************
                                              *
DETECTOR: GELI-8                    * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803          * HALF LIFE RATIO:   8.00
OFFSET:      -0.5932283 KEV         * ABUNDANCE LIMIT:   85.00%
                                              *
***************************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                                   1 SIGMA
ELEMENT          ENERGY     BKGND      AREA    CONCENTR.    ERROR      %ERROR
--------------------------------------------------------------------------------

%-COPPER         511.2      5115.      750.     0.0095     0.0013      14.0
 %-ANTIMONY      564.2      2659.   348427.     2.4867     0.0077       0.3
 %-ARSENIC       657.4      1275.      561.     0.0297     0.0031      10.3

   1009:  460.    424.    469.    473.    450.    463.    420.    447.    452.
   1018:  442.    468.    464.    531.    586.    573.    553.    481.    471.
   1027:  399.    414.    392.    401.    424.    404.    378.    398.    413.

   1117: 1251.   1608.   1784.   1724.   1459.   1296.   1721.   3463.   9326.
   1126:24043.  48151.  73654.  82230.  64755.  33093.  10379.  2235.    646.
   1135:  430.    381.    317.    338.    307.    287.    249.    277.    241.

   1301:  101.    104.     95.     83.     92.     84.     85.     92.     97.
   1310:   90.     99.    123.    156.    161.    199.    188.    134.     84.
   1319:  105.     75.     89.    107.     71.     78.     68.     89.     90.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK  IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1   1  511.19      750.      5115.   2.20  1022.78 1017   12 1.250E 00  14.0
  2   2  563.09     7151.      3553.   2.46  1126.50 1110   42 1.192E 01   1.7
  3   2  564.21   348427.      2659.   2.00  1128.74 1110   42 5.807E 02   0.2
  4   1  602.86    11494.      2617.   2.01  1205.99 1196   19 1.916E 01   1.1
  5   1  645.95      795.      1197.   2.30  1292.11 1286   12 1.325E 00   7.1
  6   1  657.45      561.      1275.   2.45  1315.08 1306   15 9.356E-01   9.9
```

```
********************************************************************************
*******************     8 JAN 1980   6:02:08 PM     ***********************
********************************************************************************

 911.19065 RF LEAD

 SAMPLE DATE:    7JAN80 1153:00
 SAMPLE IDENTIFICATION:   A/S-3C
 TYPE OF SAMPLE:   UNKNOWN
 SAMPLE QUANTITY:     11676.00         UNITS:   UG
 SAMPLE GEOMETRY:   .25 IN
 EFFICIENCY FILE NAME:   EFF.TAB1
 ***************************************************************************
                                    *
 ACQUISITION DATE:   8JAN80 1440:44 * FWHM(1332)         2.390
 PRESET TIME(LIVE):       600. SEC  * SENSITIVITY:       5.000
 ELAPSED REAL TIME:       643. SEC  * SHAPE PARAMETER : 15.0 %
 ELAPSED LIVE TIME:       600. SEC  * NBR ITERATIONS:   10.
                                    *
 ***************************************************************************
                                    *
 DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
 KEV/CHNL:        0.5003803         * HALF LIFE RATIO:    8.00
 OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                    *
 ***************************************************************************


 UNKNOWN SAMPLE REPORT


                    PEAK                                   1 SIGMA
 ELEMENT            ENERGY     BKGND       AREA      CONCENTR.     ERROR      %ERROR
 ---------------------------------------------------------------------------------

 %-COPPER          511.3       6300.       888.       0.0129      0.0017       13.2
 %-ANTIMONY        564.2       2584.     331980.      2.6980      0.0085        0.3
 %-ARSENIC         657.3       1208.       440.       0.0266      0.0033       12.4

  1009:   471.    416.    436.    408.    430.    416.    393.    407.    442.
  1018:   400.    419.    469.    509.    502.    556.    501.    456.    450.
  1027:   452.    397.    413.    388.    378.    364.    391.    383.    396.

  1117:  1157.   1562.   1742.   1628.   1403.   1311.   1741.   3318.   8920.
  1126:23055.  46191.  69993.  78808.  61388.  31363.  10121.   2187.    663.
  1135:   417.    338.    339.    266.    298.    284.    265.    243.    259.

  1301:   109.     81.     79.    104.     83.     85.     95.     82.     92.
  1310:    88.     86.    118.    143.    182.    206.    157.    128.    101.
  1319:    70.    103.     82.     86.     76.     76.     87.     76.     64.
             PULSE-PILE-UP CORRECTED DATA.  CORRECTION =   1.000

 PK IT   ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.35      888.      6300.    3.01   1023.10 1015   16 1.480E 00  13.1
  2  2  560.04     5914.      3467.    2.23   1120.41 1111   30 9.857E 00   1.9
  3  2  564.20   331980.      2584.    2.00   1128.73 1111   30 5.533E 02   0.2
  4  1  602.86    11147.      2794.    2.00   1206.00 1195   22 1.858E 01   1.2
  5  1  645.97      669.      1194.    1.81   1292.15 1286   12 1.114E 00   8.3
  6  1  657.29      440.      1208.    1.84   1314.76 1308   14 7.325E-01  12.2
```

```
***********************************************************************
****************  8 JAN 1980  6:03:19 PM  *****************
***********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-4A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   13736.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***************************************************************
                                    *
ACQUISITION DATE:  8JAN80 1451:38 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        643. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                    *
***************************************************************
                                    *
DETECTOR: GEL1-8                    * LIBRARY:NUCL.L1B1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:          0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:           -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                    *
***************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                    1. SIGMA
ELEMENT         ENERGY    BKGND      AREA     CONCENTR.   ERROR      %ERROR
------------------------------------------------------------------------------

%-COPPER        511.0     5712.       0. <    0.0044    NOT DETECTABLE
%-ANTIMONY      564.2     2388.   328153.     2.2714    0.0071        0.3
%-ARSENIC       657.2     1245.     830.      0.0429    0.0032        7.4

 1009:   413.   460.   422.   439.   409.   425.   400.   451.   446.
 1018:   412.   422.   494.   423.   475.   452.   479.   447.   424.
 1027:   411.   376.   400.   395.   391.   389.   401.   403.   399.

 1117: 1536.  2140.  2230.  2074.  1680.  1379.  1707.  3380.  8984.
 1126:22999. 45514. 68790. 77534. 61183. 31445. 10091.  2356.   649.
 1135:   425.   339.   317.   285.   282.   276.   252.   239.   251.

 1301:    80.    88.    91.    88.    76.    90.    92.    69.    84.
 1310:   102.    74.   147.   193.   267.   256.   236.   154.   109.
 1319:    88.    70.    68.    68.    92.    87.    83.    75.    81.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  8  560.04   13711.    5856.    4.04  1120.41 1108   33 2.285E 01   1.2
  2  8  564.21  328153.    2388.    2.00  1128.75 1108   33 5.469E 02   0.2
  3  1  602.88   10973.    2800.    2.04  1206.02 1195   23 1.829E 01   1.2
  4  1  645.92     777.    1524.    2.09  1292.05 1287   16 1.296E 00   8.0
  5  1  657.24     830.    1245.    2.05  1314.66 1309   15 1.383E 00   6.9
```

```
*************************************************************************
****************** 8 JAN 1980  6:04:28 PM  ******************
*************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-4B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11244.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1502:33 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        638. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                   *
*************************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803       * HALF LIFE RATIO:    8.00
OFFSET:           -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                                   *
*************************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                                   1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
-------------------------------------------------------------------------

%-COPPER         511.0     5171.      0.  <   0.0052    NOT DETECTABLE
%-ANTIMONY       564.2     2208.   297759.  2.5226      0.0080        0.3
%-ARSENIC        657.3     1084.      697.  0.0442      0.0036        8.1

  1009:   369.   359.   405.   374.   416.   428.   327.   364.   392.
  1018:   406.   436.   385.   408.   443.   429.   429.   394.   375.
  1027:   364.   346.   332.   328.   357.   347.   340.   334.   347.

  1117:  1373.  1931.  2107.  1876.  1427.  1177.  1390.  2880.  7701.
  1126: 20073. 41186. 62751. 70882. 56201. 28106.  8675.  1871.   542.
  1135:   320.   311.   264.   269.   238.   221.   217.   213.   218.

  1301:    92.    77.    78.    76.    79.    71.   100.    58.    77.
  1310:    84.    89.   115.   163.   185.   260.   201.   127.    75.
  1319:    69.    73.    66.    69.    73.    79.    78.    70.    72.
             PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  6  559.54   10967.     4468.   3.23  1119.41 1111   37 1.828E 01   1.3
  2  6  564.21  297759.     2208.   1.98  1128.75 1111   37 4.963E 02   0.2
  3  1  602.89   10015.     2033.   2.05  1206.05 1195   19 1.669E 01   1.2
  4  1  646.00     579.     1026.   1.88  1292.20 1286   12 9.657E-01   8.9
  5  1  657.33     697.     1084.   1.96  1314.84 1306   15 1.162E 00   7.7
```

```
*********************************************************************
******************* 8 JAN 1980 6:05:37 PM *****************
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-4C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   12130.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                    *
ACQUISITION DATE:  8JAN80  245:27 * FWHM(1332)        2.390
PRESET TIME(LIVE):     600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:     650. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:     600. SEC  * NBR ITERATIONS:   10.
                                    *
*********************************************************************
                                    *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                    *
*********************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                               1 SIGMA
ELEMENT          ENERGY   BKGND    AREA    CONCENTR.  ERROR    %ERROR
---------------------------------------------------------------------

%-COPPER         511.1    6657.     736.   0.0054    0.0009    16.2
%-ANTIMONY       564.2    2895.   378896.  2.6118    0.0080     0.3
%-ARSENIC        657.2    1290.    1211.   0.0515    0.0029     5.7

1009:   476.   519.   509.   498.   460.   487.   490.   518.   518.
1018:   502.   483.   583.   558.   635.   616.   569.   547.   532.
1027:   483.   489.   473.   445.   452.   430.   409.   487.   462.

1117:  2074.  2848.  3171.  2737.  1990.  1573.  1950.  3762. 10156.
1126: 26519. 53359. 80731. 90505. 70288. 34214. 10325.  2246.   726.
1135:   464.   439.   403.   374.   344.   329.   303.   316.   306.

1301:    97.   123.   111.   117.   128.   124.   105.    94.    89.
1310:   113.   126.   180.   261.   344.   376.   281.   184.   115.
1319:   111.   100.    90.   111.    78.    83.   106.    96.    93.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA     BKGND   FWHM  CHANNEL  LEFT PW   CTS/SEC    %ERR

 1  1  511.14      736.     6657.   2.49 1022.69 1018   14 1.226E 00  16.1
 2  5  559.52    16201.     5313.   3.09 1119.37 1109   33 2.700E 01   1.0
 3  5  564.19   378896.     2895.   1.98 1128.72 1109   33 6.315E 02   0.2
 4  1  602.85    11136.     2668.   2.00 1205.97 1198   16 1.856E 01   1.2
 5  1  646.15      752.     1582.   2.06 1292.50 1286   15 1.254E 00   8.3
 6  1  657.22     1211.     1290.   2.04 1314.63 1309   15 2.019E 00   5.1
```

```
***********************************************************************
*****************  8 ... 1980  6:06:47 PM   ***** ***********
***********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   A/S-5A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   11543.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                 *
ACQUISITION DATE:  8JAN80 1513:23 * FWHM(1332)          2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:        5.000
ELAPSED REAL TIME:      635. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:    10.
                                 *
*****************************************************************
                                 *
DETECTOR: GEL1-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                 *
*****************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                 1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.  ERROR     %ERROR
-----------------------------------------------------------------------

%-COPPER        511.0     4612.       0.  <  0.0048    NOT DETECTABLE
%-ANTIMONY      564.2     1866.   273035.   2.2575     0.0073       0.3
%-ARSENIC       657.3      791.     705.    0.0438     0.0032       7.3

  1009:  366.   358.   358.   348.   351.   326.   366.   334.   330.
  1018:  382.   369.   381.   371.   354.   373.   391.   323.   350.
  1027:  326.   328.   348.   318.   308.   298.   326.   301.   306.

  1117: 1230.  1649.  1884.  1615.  1286.  1112.  1395.  2561.  7237.
  1126:18367. 37316. 57893. 65481. 51681. 26032.  8255.  1676.   450.
  1135:  287.   252.   220.   217.   195.   195.   200.   188.   132.

  1301:   65.    52.    64.    72.    55.    64.    75.    71.    52.
  1310:   68.    97.    94.   136.   190.   197.   183.   129.    89.
  1319:   65.    66.    52.    50.    53.    65.    61.    61.    66.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000

PK IT  ENERGY    AREA      BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

  1  8  560.03   12018.     5112.  4.38  1120.39 1109  31 2.003E 01  1.2
  2  8  564.22  273035.     1866.  1.97  1128.77 1109  31 4.551E 02  0.2
  3  1  602.87    9152.     1539.  1.95  1206.02 1197  17 1.525E 01  1.2
  4  1  646.01     616.      923.  2.26  1292.22 1286  13 1.027E 00  8.1
  5  1  657.32     705.      791.  2.36  1314.83 1309  14 1.175E 00  6.8
```

```
**************************************************************
*****************   8 JAN 1980  6:07:55 PM   ****************
**************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-5B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   12023.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************
                              *
ACQUISITION DATE:  8JAN80  307:20 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      643. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                              *
*********************************************************
                              *
DETECTOR: GEL1-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                              *
*********************************************************


UNKNOWN SAMPLE REPORT


                   PEAK                               1.SIGMA
ELEMENT           ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
--------------------------------------------------------------------------

%-COPPER          511.0     6096.       0. <   0.0028    NOT DETECTABLE
%-ANTIMONY        564.2     2376.   335524.    2.3424    0.0073       0.3
%-ARSENIC         657.3     1219.      859.    0.0372    0.0027       7.2

  1009:  459.   379.   434.   429.   433.   408.   410.   441.   446.
  1018:  415.   463.   493.   501.   503.   540.   521.   454.   477.
  1027:  435.   407.   366.   397.   375.   427.   398.   402.   401.

  1117: 1726.  2438.  2706.  2454.  1753.  1424.  1762.  3363.  8867.
  1126:23161. 46945. 71425. 80501. 62781. 30373.  9309.  2008.   585.
  1135:  395.   344.   332.   281.   272.   282.   251.   219.   261.

  1301:  119.    84.    90.    94.    84.    94.    89.    89.    89.
  1310:   99.    99.   138.   220.   295.   300.   266.   147.    98.
  1319:   80.    83.    98.    99.    96.    77.    87.    71.    72.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  6  559.56   14718.      4645.    3.23  1119.45 1107   37 2.453E 01   1.1
  2  6  564.20  335524.      2376.    1.97  1128.73 1107   37 5.592E 02   0.2
  3  1  602.86    9783.      2631.    2.01  1205.99 1199   19 1.631E 01   1.3
  4  1  646.18     630.      1173.    2.10  1292.57 1287   12 1.050E 00   8.7
  5  1  657.25     859.      1219.    1.82  1314.70 1309   13 1.432E 00   6.7
```

```
***************************************************************
****************  8 JAN 1980  6:09:04 PM  ****************
***************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   A/S-5C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    10971.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************
                                        *
ACQUISITION DATE:  8JAN80 1524:09 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       637. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                        *
*************************************************************
                                        *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:    85.00%
                                        *
*************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                 1 SIGMA
ELEMENT          ENERGY    BKGND     AREA    CONCENTR.   ERROR      %ERROR
-------------------------------------------------------------------------

%-COPPER         511.0     4989.       0. <   0.0053    NOT DETECTABLE
%-ANTIMONY       564.2     2098.   289264.    2.5212    0.0081        0.3
%-ARSENIC        657.2      893.      697.    0.0457    0.0035        7.6

 1009:  393.    384.    381.    385.    403.    410.    318.    389.    357.
 1018:  353.    378.    372.    394.    436.    416.    411.    386.    369.
 1027:  342.    386.    364.    336.    320.    345.    336.    361.    323.

 1117: 1316.   1776.   2034.   1898.   1315.   1225.   1471.   2709.   7646.
 1126:19631.  39769.  60776.  69333.  54679.  27334.   8446.   1860.    487.
 1135:  332.    309.    237.    218.    225.    220.    205.    189.    190.

 1301:   71.     74.     74.     70.     87.     72.     73.     69.     58.
 1310:   67.    100.    124.    158.    202.    184.    185.    120.     81.
 1319:   76.     75.     58.     65.     63.     63.     70.     53.     65.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC     %ERR

  1  6  559.98   10903.    4643.    3.58   1120.29 1110   34 1.817E 01    1.3
  2  6  564.22  289264.    2098.    1.98   1128.76 1110   34 4.821E 02    0.2
  3  1  602.88    9737.    1692.    2.00   1206.03 1198   17 1.623E 01    1.2
  4  1  646.09     551.    1108.    2.02   1292.38 1286   13 9.176E-01    9.6
  5  1  657.18     697.     893.    2.40   1314.55 1309   14 1.161E 00    7.2
```

```
**************************************************************
****************** 8 JAN 1980  6:10:12 PM  *****************
**************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-6A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   15409.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                    *
ACQUISITION DATE:  8JAN80  329:08 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       654. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                    *
*****************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                    *
*****************************************************************


UNKNOWN SAMPLE REPORT


                    PEAK                              1 SIGMA
ELEMENT            ENERGY    BKGND     AREA     CONCENTR.    ERROR        %ERROR
--------------------------------------------------------------------------------

%-COPPER           511.0     7579.      0.  <   0.0024     NOT DETECTABLE
%-ANTIMONY         564.2     3521.   413890.   2.2633      0.0069         0.3
%-ARSENIC          657.2     1314.     1192.   0.0407      0.0024         5.8

 1009:   579.   576.   581.   525.   566.   551.   513.   503.   558.
 1018:   575.   603.   593.   649.   672.   638.   610.   605.   559.
 1027:   503.   511.   519.   481.   490.   452.   457.   493.   499.

 1117:  2059.  2828.  3297.  2991.  2049.  1743.  2096.  3964. 10550.
 1126: 27749. 56713. 86854. 99656. 78368. 39472. 12895.  2848.   869.
 1135:   621.   531.   447.   461.   438.   386.   395.   357.   341.

 1301:   125.   124.   124.   121.   109.   134.   138.   106.   113.
 1310:   108.   162.   187.   290.   342.   357.   328.   207.   131.
 1319:   126.   108.   111.   123.   110.   114.    93.   118.   111.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT FW   CTS/SEC    %ERR

 1  5  559.57    16602.     6038.    3.11  1119.47 1109   30 2.767E 01  1.0
 2  5  564.22   413890.    3521.    1.98  1128.77 1109   30 6.898E 02  0.2
 3  1  602.88    12443.    2957.    2.01  1206.03 1197   18 2.074E 01  1.1
 4  1  645.96      926.    1804.    2.16  1292.12 1285   15 1.543E 00  7.3
 5  1  657.23     1192.    1314.    2.18  1314.65 1309   12 1.987E 00  5.2
```

```
************************************************************
****************** 8 J●N 1980  6:11:22 PM  *****●***********
************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-6B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    11218.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************
                              *
ACQUISITION DATE:  8JAN80  340:14 * FWHM(1332)           2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:         5.000
ELAPSED REAL TIME:       641. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                              *
************************************************************
                              *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                              *
************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
------------------------------------------------------------------------

%-COPPER        511.0     4623.      764.    0.0064     0.0008      13.2
%-ANTIMONY      564.2     2272.   315454.    2.3741     0.0075       0.3
%-ARSENIC       657.3     1071.      753.    0.0355     0.0027       7.6

  1009:   402.    449.    421.    380.    371.    435.    404.    400.    382.
  1018:   437.    386.    484.    444.    525.    495.    470.    437.    441.
  1027:   376.    371.    388.    371.    317.    387.    420.    391.    375.

  1117:  1586.   2142.   2366.   2186.   1590.   1314.   1526.   3075.   8122.
  1126:21491.  43734.  66835.  75998.  59018.  29458.   8933.   1954.    572.
  1135:   360.    309.    304.    270.    264.    229.    206.    245.    199.

  1301:    69.     77.     87.     94.     93.     95.     73.     81.     76.
  1310:    82.    101.    131.    171.    215.    255.    223.    136.     85.
  1319:    77.     60.     65.     80.     69.     74.     76.     63.     87.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT   ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.00      764.     4623.    2.96  1022.41 1017  12 1.274E 00  13.1
  2  6  559.54    12581.     4592.    3.19  1119.42 1109  42 2.097E 01   1.2
  3  6  564.21   315454.     2272.    1.97  1128.74 1109  42 5.258E 02   0.2
  4  1  602.88     9567.     2273.    2.00  1206.02 1196  21 1.595E 01   1.2
  5  1  646.01      720.     1172.    2.15  1292.23 1286  14 1.200E 00   7.7
  6  1  657.33      753.     1071.    2.08  1314.84 1309  14 1.255E 00   7.1
```

```
********************************************************************
*****************   8 ▓▓ 1980   6:12:31 PM   *****▓*********
********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   A/S-6C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    12582.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                    *
ACQUISITION DATE:  8JAN80  351:09  * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:       647. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC  * NBR ITERATIONS:  10.
                                    *
*****************************************************************
                                    *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                    *
*****************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                  1 SIGMA
ELEMENT          ENERGY    BKGND      AREA     CONCENTR.  ERROR      %ERROR
--------------------------------------------------------------------------
%-COPPER         510.7     6143.      1019.    0.0076    0.0009      11.4
%-ANTIMONY       564.2     2688.    360896.    2.4263    0.0075       0.3
%-ARSENIC        657.3     1679.       937.    0.0395    0.0029       7.4

  1009:   454.   538.   525.   481.   452.   440.   441.   478.   474.
  1018:   507.   506.   563.   531.   614.   597.   549.   492.   480.
  1027:   464.   428.   446.   433.   403.   445.   421.   405.   379.

  1117:  1867.  2460.  2893.  2484.  1948.  1492.  1850.  3523.  9607.
  1126: 24833. 50403. 76925. 86661. 67130. 33124. 10126.  2163.   677.
  1135:   448.   422.   355.   352.   304.   321.   311.   292.   296.

  1301:   108.   106.   101.   103.   104.    99.    91.    86.    98.
  1310:   130.   132.   165.   235.   252.   294.   272.   187.   145.
  1319:   105.   124.    87.   101.   102.    87.    90.    93.    98.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL  LEFT PW   CTS/SEC    %ERR

  1  1  510.74    1019.    6143.    3.00  1021.88 1015  14 1.699E 00  11.3
  2  6  559.55   15275.    5163.    3.26  1119.43 1107  34 2.546E 01   1.0
  3  6  564.20  360896.    2688.    1.97  1128.73 1107  34 6.015E 02   0.2
  4  1  602.86   10672.    2950.    2.01  1205.98 1196  20 1.779E 01   1.2
  5  1  646.06     674.    1305.    1.90  1292.33 1287  12 1.123E 00   8.5
  6  1  657.31     937.    1679.    2.27  1314.81 1305  17 1.561E 00   7.0
```

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-7A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    12640.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                    *
ACQUISITION DATE:  8JAN80  402:11 * FWHM(1.332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        645. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                    *
*****************************************************************
                                    *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                    *
*****************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	6435.	0. <	0.0028	NOT DETECTABLE	
%-ANTIMONY	564.2	2388.	349893.	2.3461	0.0073	0.3
%-ARSENIC	657.2	1290.	810.	0.0342	0.0026	7.6

```
1009:  461.   455.   458.   482.   437.   425.   438.   455.   499.
1018:  477.   473.   545.   519.   541.   561.   520.   515.   490.
1027:  433.   407.   432.   378.   425.   432.   423.   400.   407.

1117: 1834.  2505.  2842.  2415.  1885.  1407.  1786.  3410.  9296.
1126:24214. 48749. 74190. 83453. 65322. 32309.  9818.  2119.   702.
1135:  427.   410.   327.   340.   311.   268.   279.   271.   258.

1301:   80.    86.    88.   103.   102.    84.   105.    96.    90.
1310:   95.   108.   146.   229.   289.   322.   230.   161.   111.
1319:   91.    88.   108.    78.    91.    95.    86.    83.    80.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	6	559.52	15197.	4674.	3.23	1119.38	1107	37	2.533E 01	1.0
2	6	564.20	349893.	2388.	1.98	1128.73	1107	37	5.832E 02	0.2
3	1	602.86	10502.	2793.	2.03	1206.00	1194	21	1.750E 01	1.2
4	1	645.92	660.	1245.	1.94	1292.05	1286	12	1.101E 00	8.5
5	1	657.21	810.	1290.	1.74	1314.60	1308	13	1.351E 00	7.2

```
******************************************************************
****************        8 ●● 1980  6:14:50 PM   *****●●***********
******************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   A/S-7B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   13536.00        UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
***************************************************************
                                      *
ACQUISITION DATE:   8JAN80 1534:59 * FWHM(1332)           2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:         5.000
ELAPSED REAL TIME:        644. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:     10.
                                      *
***************************************************************
                                      *
DETECTOR: GEL1-8                    * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:           -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                      *
***************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                              1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER        511.0     5873.       0. <   0.0047    NOT DETECTABLE
%-ANTIMONY      564.2     2361.   338979.    2.3993    0.0075      0.3
%-ARSENIC       657.1     1124.      827.    0.0442    0.0032      7.2

 1009:  489.   431.   428.   408.   459.   456.   380.   457.   402.
 1018:  422.   407.   492.   455.   488.   501.   509.   476.   452.
 1027:  419.   393.   420.   395.   441.   415.   391.   420.   380.

 1117: 1615.  2082.  2346.  2157.  1589.  1399.  1697.  3243.  9046.
 1126:23374. 47087. 71838. 80382. 63090. 31846.  9918.  2141.   622.
 1135:  439.   368.   360.   313.   273.   280.   273.   272.   245.

 1301:   91.    81.    85.    90.   100.    99.    76.    86.    98.
 1310:   93.   113.   173.   199.   254.   248.   193.   141.   115.
 1319:   87.    79.    87.    72.    86.    90.    77.    88.    65.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT   ENERGY    AREA      BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

  1  6  559.59   13381.     4955.   3.48  1119.52 1107  34 2.230E 01  1.1
  2  6  564.20  338979.     2361.   1.99  1128.74 1107  34 5.650E 02  0.2
  3  1  602.87   11416.     2560.   2.00  1206.00 1194  20 1.903E 01  1.1
  4  1  646.04     739.     1062.   1.89  1292.28 1287  11 1.232E 00  7.2
  5  1  657.08     827.     1124.   2.27  1314.34 1308  14 1.379E 00  6.7
```

```
*********************************************************************
********************* 8 J█ █ 1980  6:16:00 PM  *****█**********
*********************************************************************

9111.9065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-7C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11884.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                    *
ACQUISITION DATE:  8JAN80   424:12 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        647. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                    *
*********************************************************************
                                    *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                    *
*********************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                                 1. SIGMA
ELEMENT         ENERGY     BKGND      AREA     CONCENTR.   ERROR      %ERROR
---------------------------------------------------------------------------

%-COPPER        511.0     6237.       802.     0.0066     0.0009      14.4
%-ANTIMONY      564.2     2844.    368438.     2.6379     0.0081       0.3
%-ARSENIC       657.3     1743.      1040.     0.0472     0.0033       7.0

 1009:   505.    507.    489.    491.    454.    459.    469.    442.    472.
 1018:   472.    508.    498.    560.    576.    586.    538.    519.    488.
 1027:   467.    477.    434.    437.    418.    422.    424.    430.    435.

 1117:  1870.   2598.   2919.   2669.   1897.   1550.   1865.   3562.   9661.
 1126: 25252.  51404.  78592.  88578.  68395.  34203.  10481.   2267.    697.
 1135:   493.    399.    387.    354.    359.    287.    294.    303.    312.

 1301:   113.    100.     99.    104.     87.    105.    105.     95.    120.
 1310:   117.    127.    151.    233.    315.    312.    292.    185.    125.
 1319:    94.    106.    111.     87.     84.     92.     96.     72.    105.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =   1.000

 PK IT   ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT FW   CTS/SEC    %ERR

  1  1   511.03      802.     6237.    2.84  1022.46 1016   14 1.337E 00  14.4
  2  6   559.55    15270.     5571.    3.17  1119.43 1108   35 2.545E 01   1.1
  3  6   564.20   368438.     2844.    1.97  1128.73 1108   35 6.141E 02   0.2
  4  1   602.87    10995.     2983.    1.97  1206.02 1198   19 1.832E 01   1.2
  5  1   645.93      669.     1413.    1.96  1292.07 1286   12 1.115E 00   8.8
  6  1   657.29     1040.     1743.    2.06  1314.76 1305   19 1.733E 00   6.5
```

```
*******************************************************************
****************** 8 J▓ 1980  6:17:06 PM  *****▓*********
*******************************************************************

9111.9065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  S626A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9670.000      UNITS:  UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*******************************************************************
                                 *
ACQUISITION DATE:  8JAN80 1545:57 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                 *
*******************************************************************
                                 *
DETECTOR: GEL1-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                 *
*******************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                              1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
-------------------------------------------------------------------------

%-COPPER        511.0    1837.      4113.    0.0764     0.0020       2.6
%-ANTIMONY      564.2    2508.     71035.    0.7051     0.0033       0.5
%-ARSENIC       657.4     190.        0. <  0.0050.    NOT DETECTABLE

 1009:   99.    100.     95.     97.     90.     95.   1.09.    124.    154.
 1018:  209.    303.    487.    675.    761.    737.    646.    466.    332.
 1027:  210.    140.    117.    108.     81.     67.     66.     76.     76.

 1117:  165.    247.    235.    233.    262.    246.    331.    705.   1775.
 1126: 4684.   9829.  15257.  17292.  13539.   6739.   2017.    355.     68.
 1135:   51.     25.     37.     27.     33.     24.     22.     23.     25.

 1301:   15.     14.     11.     22.     11.     12.     13.     14.     11.
 1310:   12.     13.     14.     13.     10.     16.     28.     16.     14.
 1319:   17.     12.     14.     18.     12.     11.     11.     15.     11.
        PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.04    4113.    1837.    2.82  1022.48 1012  22 6.855E 00    2.1
 2  1  564.22   71035.    2508.    1.95  1128.76 1120  19 1.184E 02    0.4
 3  1  602.83    2494.     330.    2.05  1205.92 1197  20 4.156E 00    2.3
 4  1  646.14     164.     199.    2.09  1292.49 1286  15 2.730E-01   14.5
```

```
**************************************************************
******************* 8 ___ 1980  6:18:16 PM  ****● ***********
**************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  S626B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   8226.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***************************************************************
                                  *
ACQUISITION DATE:  8JAN80 1556:19 * FWHM(1332)         2.390
PRESET TIME(LIVE):       300. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:       531. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       524. SEC * NBR ITERATIONS:   10.
                                  *
***************************************************************
                                  *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                  *
***************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                              1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER         511.0     1354.      3033.     0.0765    0.0022       2.9
%-ANTIMONY       564.2     1692.     52872.     0.7077    0.0037       0.5
%-ARSENIC        657.4      155.        0. <    0.0062    NOT DETECTABLE

1009:    65.     80.      81.     58.     95.     80.     97.     79.    119.
1018:   161.    252.     359.    468.    563.    537.    459.    368.    236.
1027:   169.     98.      86.     70.     57.     67.     52.     65.     66.

1117:   118.    147.     156.    180.    165.    191.    262.    493.   1372.
1126:  3619.   7304.   11365.  12983.   9942.   4873.   1465.    263.     38.
1135:    26.     22.      16.     24.     26.     22.     17.     14.     17.

1301:    15.     10.       4.      8.     16.      6.      7.      8.      6.
1310:    10.     15.      14.     13.     16.     14.     13.      8.     12.
1319:     9.     14.      11.      8.     12.     11.     12.     13.     11.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000

PK IT  ENERGY     AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.03     3033.    1354.   2.91  1022.48 1012   21 5.788E 00   2.5
 2  1  564.21    52872.    1692.   1.94  1128.74 1120   18 1.009E 02   0.4
 3  1  602.84     1868.     259.   2.05  1205.95 1195   23 3.566E 00   2.6
 4  1  638.53       68.     165.   2.65  1277.27 1272   14 1.306E-01  29.1
 5  1  645.88      105.     365.   2.13  1291.96 1287   27 2.012F-01  27.4
```

```
***************************************************************************
******************* 8 ... 1980  6:19:25 PM  ****** ***********
***************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  5626C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   8418.000      UNITS:  UG
SAMPLE GEOMETRY:  .25 1N
EFFICIENCY FILE NAME:  EFF.TAB1
******************************************************************
                                           *
ACQUISITION DATE:  8JAN80 1605:25 * FWHM(1332)        2.390
PRESET TIME(LIVE):       300. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       305. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       300. SEC * NBR ITERATIONS:   10.
                                           *
******************************************************************
                                           *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:           0.5003803     * HALF LIFE RATIO:   8.00
OFFSET:           -0.5932283 KEV  * ABUNDANCE LIMIT:  85.00%
                                           *
******************************************************************


UNKNOWN SAMPLE REPORT


               PEAK                                    1 SIGMA
ELEMENT        ENERGY    BKGND      AREA     CONCENTR.   ERROR      %ERROR
------------------------------------------------------------------------

%-COPPER        511.0    1001.     1977.     0.0856     0.0030       3.5
%-ANTIMONY      564.2    1175.    34156.     0.7813     0.0048       0.6
%-ARSENIC       657.4     105.       0. <    0.0088     NOT DETECTABLE

  1009:    49.    56.     36.     53.     41.    60.    66.     66.    83.
  1018:   112.   180.    226.    307.    344.   348.   288.    245.   151.
  1027:    85.    71.     61.     34.     36.    45.    43.     39.    32.

  1117:   108.   108.    111.    111.    118.   139.   171.    303.   878.
  1126:  2434.  4825.   7252.   8199.   6444.  3120.   927.    184.    44.
  1135:    11.    18.     24.     15.     11.    15.    19.     16.    14.

  1301:     6.     5.     11.      8.      6.     5.    13.      9.     9.
  1310:     7.     9.      9.     11.      5.     9.    10.      9.     6.
  1319:     8.     8.      5.      4.      8.     6.     4.      5.     3.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL  LEFT  PW   CTS/SEC   %ERR

  1  1  511.02    1977.     1001.    3.05  1022.46  1011  23 6.589E 00   3.2
  2  1  564.20   34156.     1175.    1.97  1128.73  1120  18 1.139E 02   0.6
  3  1  602.86    1186.      236.    1.94  1205.99  1196  27 3.953E 00   3.4
  4  1  645.69      76.      145.    2.55  1291.59  1281  20 2.527E-01  25.2
```

```
*************************************************************
****************   8 JAN 1980  6:20:33 PM   *****************
*************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  S604A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   8455.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************
                              *
ACQUISITION DATE:  8JAN80 1610:44 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:      620. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC * NBR ITERATIONS:     10.
                              *
*************************************************************
                              *
DETECTOR: GELI-8               * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803      * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                              *
*************************************************************


UNKNOWN SAMPLE REPORT


              PEAK                              1 SIGMA
ELEMENT       ENERGY   BKGND     AREA     CONCENTR.   ERROR      %ERROR
----------------------------------------------------------------------

%-COPPER      511.6    2373.     307.     0.0067     0.0015      23.2
%-ANTIMONY    564.2     895.   149470.    1.7044     0.0063       0.4
%-ARSENIC     657.2     695.     1037.    0.0901     0.0049       5.4

  1009:  186.    205.    169.   158.   201.   196.   212.   196.   203.
  1018:  200.    174.    173.   217.   258.   241.   243.   209.   234.
  1027:  225.    188.    204.   170.   208.   184.   181.   165.   184.

  1117: 1588.   2329.   2672.  2161.  1384.   795.   771.  1462.  3965.
  1126:10264.  21014.  31845. 35788. 27679. 13602.  3864.   771.   185.
  1135:  115.    109.     86.    95.    83.    80.    88.    75.    72.

  1301:   26.     39.     34.    38.    32.    19.    34.    37.    33.
  1310:   41.     73.    112.   185.   264.   259.   193.   134.    51.
  1319:   51.     35.     35.    34.    32.    38.    43.    29.    35.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND    FWHM   CHANNEL  LEFT PW   CTS/SEC   %ERR

  1  1  511.64     307.    2373.    2.49  1023.69  1017   12  5.118E-01  23.1
  2  3  559.32   12062.    1428.    2.40  1118.97  1107   35  2.010E 01   1.0
  3  3  564.20  149470.     895.    1.97  1128.72  1107   35  2.491E 02   0.3
  4  1  602.86    5139.     971.    2.03  1205.99  1194   21  8.566E 00   1.6
  5  1  646.08     351.     546.    1.80  1292.37  1286   14  5.852E-01  10.8
  6  1  657.19    1037.     695.    2.11  1314.57  1303   20  1.728E 00   4.8
```

```
***********************************************************
*****************    8 .     1980  6:21:41 PM   *****************
***********************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   S604B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    7462.000          UNITS:  UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
***********************************************************
                                         *
ACQUISITION DATE:   8JAN80 1621:18 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:        5.000
ELAPSED REAL TIME:      619. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                         *
***********************************************************
                                         *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                         *
***********************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                                    1 SIGMA
ELEMENT          ENERGY      BKGND       AREA     CONCENTR.    ERROR       %ERROR
-----------------------------------------------------------------------------------

%-COPPER         511.0       2539.       0.  <    0.0059     NOT DETECTABLE
%-ANTIMONY       564.2        882.    141143.   1.8270      0.0068          0.4
%-ARSENIC        657.1        516.      996.    0.0986      0.0051          5.2

 1009:  189.   212.   209.   175.   175.   193.   200.   161.   183.
 1018:  194.   191.   192.   220.   198.   217.   216.   204.   200.
 1027:  190.   173.   144.   184.   153.   175.   171.   178.   149.

 1117: 1453.  2131.  2389.  2040.  1245.   748.   736.  1472.  3754.
 1126: 9868. 19786. 29883. 33488. 26131. 13031.  3728.   733.   178.
 1135:   80.    89.    88.    75.    96.    79.    70.    79.    77.

 1301:   36.    36.    32.    28.    42.    32.    33.    39.    34.
 1310:   47.    76.   111.   167.   281.   246.   188.   103.    54.
 1319:   44.    27.    29.    37.    27.    30.    32.    24.    35.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT   ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  3  559.33   10887.      1514.   2.40  1119.00 1109  29 1.814E 01   1.1
  2  3  564.20  141143.       882.   1.99  1128.72 1109  29 2.352E 02   0.3
  3  1  602.88    4694.       803.   1.99  1206.03 1197  19 7.824E 00   1.7
  4  1  646.03     259.       560.   1.91  1292.27 1285  14 4.318E-01  14.3
  5  1  657.12     996.       516.   1.99  1314.42 1307  16 1.660E 00   4.5
```

```
******************************************************************
******************    8 J▓N 1980  6:22:49 PM   *****▓**********
******************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  S604C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   8039.000       UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1631:47 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       623. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                   *
*************************************************************
                                   *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                   *
*************************************************************


UNKNOWN SAMPLE REPORT

                    PEAK                                1 SIGMA
ELEMENT            ENERGY    BKGND      AREA    CONCENTR.    ERROR     %ERROR
----------------------------------------------------------------------------

%-COPPER           511.0    3058.       0. <    0.0061    NOT DETECTABLE
%-ANTIMONY         564.2    1067.    164151.    1.9760    0.0071        0.4
%-ARSENIC          657.3     575.      1217.    0.1123    0.0053        4.7

 1009:   230.   207.   215.   218.   217.   210.   235.   204.   201.
 1018:   206.   242.   249.   253.   276.   279.   269.   234.   239.
 1027:   213.   193.   207.   184.   181.   178.   201.   202.   200.

 1117: 1801.  2570.  3018.  2374.  1476.   940.   927.  1664.  4419.
 1126:11398. 23227. 34838. 38989. 30132. 15098.  4437.   849.   205.
 1135:   140.    98.   119.    98.    79.    89.   100.    87.    89.

 1301:    36.    38.    47.    25.    28.    35.    45.    40.    48.
 1310:    46.    62.   118.   209.   255.   279.   258.   147.    75.
 1319:    45.    37.    37.    38.    28.    40.    36.    34.    34.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

  1  3  559.33   13441.    1726.   2.42  1119.00 1108  34 2.240E 01   1.0
  2  3  564.19  164151.    1067.   1.99  1128.71 1108  34 2.736E 02   0.2
  3  1  602.88    5614.    1021.   1.97  1206.04 1196  19 9.356E 00   1.6
  4  1  645.97     329.     808.   1.94  1292.15 1286  17 5.476E-01  13.4
  5  1  657.28    1217.     575.   2.23  1314.74 1305  19 2.029E 00   4.0
```

91119065 RF LEAD

SAMPLE	SAM. WT.	%-COPPER	%-ANTIMONY		%-ARSENIC
Q328A	17029.000	0.02921	2.46652	<	0.00534
Q228B	12277.000	0.03243	2.72631	<	0.00608
Q328C	11861.000	0.03475	2.86423	<	0.00639
		0.03213 AVG	2.68569 AVG		0.00000 AVG
		0.002784 SD	0.201940 SD		0.000000 SD
		8.663738 %RSD	7.519114 %RSD		0.000000 %RSD
Q329A	11684.000	0.01258	0.33357	<	0.00249
Q329B	13842.000	0.01391	0.35169	<	0.00233
Q329C	11563.000	0.01450	0.37985	<	0.00240
		0.01367 AVG	0.35504 AVG		0.00000 AVG
		0.000983 SD	0.023320 SD		0.000000 SD
		7.194860 %RSD	6.568174 %RSD		0.000000 %RSD
Q330A	12210.000	0.03014	0.66632		0.01236
Q330B	10673.000	0.03150	0.68819		0.01463
Q330C	13097.000	0.03380	0.73325		0.01396
		0.03181 AVG	0.69592 AVG		0.01365 AVG
		0.001847 SD	0.034127 SD		0.001164 SD
		5.804967 %RSD	4.903832 %RSD		8.527825 %RSD
Q331A	8011.000	0.03064	0.64325		0.00754
Q331B	9696.000	0.03334	0.68128		0.00934
Q331C	10386.000	0.03592	0.70055		0.00913
		0.03330 AVG	0.67503 AVG		0.00867 AVG
		0.002640 SD	0.029154 SD		0.000988 SD
		7.926797 %RSD	4.318876 %RSD		11.397960 %RSD
Q332A	11093.000	0.01312	0.63948	<	0.00468
Q332B	12522.000	0.01578	0.69150		0.00592
Q332C	9862.000	0.01648	0.72914		0.00354
		0.01513 AVG	0.68671 AVG		0.00473 AVG
		0.001771 SD	0.045021 SD		0.001685 SD
		11.708140 %RSD	6.556032 %RSD		35.611404 %RSD
Q333A	12598.000	0.00645	0.65763		0.00596
Q333B	11767.000	0.00624	0.73015	<	0.00475
Q333C	11840.000	0.00957	0.77641	<	0.00487
		0.00742 AVG	0.72139 AVG		0.00596 AVG
		0.001869 SD	0.059874 SD		0.000000 SD
		25.184477 %RSD	8.299751 %RSD		0.000000 %RSD
Q334A	9873.000	0.00672	0.69852		0.00554
Q334B	11470.000	0.00761	0.73029		0.00462
Q334C	13249.000	0.00669	0.75362		0.00542
		0.00701 AVG	0.72747 AVG		0.00520 AVG
		0.000521 SD	0.027657 SD		0.000499 SD

Q335A	11855. 000	0. 00539	0. 59..	0. 01043
Q335B	14080. 000	0. 00532	0. 63144	0. 00789
Q335C	9464. 000	0. 00494	0. 64799	0. 00832
		0. 00522 AVG	0. 62566 AVG	0. 00888 AVG
		0. 000242 SD	0. 025717 SD	0. 001359 SD
		4. 646096 %RSD	4. 110319 %RSD	15. 311225 %RSD

Q336A	8158. 000	0. 00701	0. 65073	0. 00634
Q336B	10453. 000	0. 00595	0. 68361	0. 00506
Q336C	11304. 000	0. 00721	0. 73080	0. 00791
		0. 00672 AVG	0. 68838 AVG	0. 00644 AVG
		0. 000675 SD	0. 040244 SD	0. 001427 SD
		10. 037654 %RSD	5. 846116 %RSD	22. 165512 %RSD

Q337A	9607. 000	0. 00592	0. 60777	0. 01095
Q337B	10572. 000	0. 00533	0. 61734	0. 00905
Q337C	9809. 000	0. 00640	0. 64693 <	0. 00426
		0. 00588 AVG	0. 62401 AVG	0. 01000 AVG
		0. 000532 SD	0. 020414 SD	0. 005888 SD
		9. 037002 %RSD	3. 271468 %RSD	58. 893085 %RSD

Q338A	11368. 000	0. 01140	0. 63138	0. 01727
Q338B	11406. 000	0. 01102	0. 65316	0. 01455
Q338C	14742. 000	0. 01248	0. 69252	0. 01490
		0. 01163 AVG	0. 65902 AVG	0. 01557 AVG
		0. 000758 SD	0. 030989 SD	0. 001480 SD
		6. 513090 %RSD	4. 702341 %RSD	9. 504572 %RSD

Q339A	9328. 000	0. 02115	0. 70300 <	0. 00344
Q339B	13724. 000	0. 02095	0. 71214 <	0. 00300
Q339C	10783. 000	0. 02301	0. 75004 <	0. 00334
		0. 02170 AVG	0. 72173 AVG	0. 00000 AVG
		0. 001136 SD	0. 024946 SD	0. 000000 SD
		5. 232044 %RSD	3. 456365 %RSD	0. 000000 %RSD

Q340A	9980. 000	0. 00566	0. 60059	0. 00836
Q340B	13486. 000	0. 00595	0. 61933	0. 00756
Q340C	10947. 000	0. 00522	0. 66488	0. 00867
		0. 00561 AVG	0. 62827 AVG	0. 00820 AVG
		0. 000366 SD	0. 033066 SD	0. 000570 SD
		6. 521050 %RSD	5. 263102 %RSD	6. 948972 %RSD

Q358A	11667. 000	0. 01841	0. 48634 <	0. 00376
Q358B	11868. 000	0. 01755	0. 49729 <	0. 00396
Q358C	13447. 000	0. 02123	0. 52972 <	0. 00372
		0. 01907 AVG	0. 50445 AVG	0. 00000 AVG
		0. 001925 SD	0. 022562 SD	0. 000000 SD
		10. 097569 %RSD	4. 472706 %RSD	0. 000000 %RSD

| Q359B | 12453. 000 | 0. 0.... | 0. 55... | 0. 00... |

Q359B	12274.000		0.02251	0.52149	<	0.00313
Q359C	12112.000		0.02475	0.54687		0.00971
			0.02269 AVG	0.52438 AVG		0.00649 AVG
			0.001973 SD	0.021184 SD		0.005659 SD
			8.695369 %RSD	4.039794 %RSD		87.169189 %RSD
Q360A	10138.000		0.01657	0.53707		0.00631
Q360B	12238.000		0.01804	0.56056	<	0.00361
Q360C	9200.000		0.01852	0.57420	<	0.00411
			0.01771 AVG	0.55728 AVG		0.00631 AVG
			0.001015 SD	0.018785 SD		0.000000 SD
			5.729955 %RSD	3.370900 %RSD		0.000000 %RSD
Q361A	12504.000		0.02262	0.51327	<	0.00433
Q361B	9414.000		0.02315·	0.54716	<	0.00540
Q361C	12549.000		0.02338	0.55880	<	0.00433
			0.02305 AVG	0.53974 AVG		0.00000 AVG
			0.000388 SD	0.023657 SD		0.000000 SD
			1.681912 %RSD	4.382969 %RSD		0.000000 %RSD
Q362A	11345.000		0.05731	0.66117	<	0.00439
Q362B	14529.000		0.05728	0.61937	<	0.00346
Q362C	13393.000		0.07027	0.76541	<	0.00332
			0.06162 AVG	0.68198 AVG		0.00000 AVG
			0.007490 SD	0.075209 SD		0.000000 SD
			12.154816 %RSD	11.027936 %RSD		0.000000 %RSD
A/S-1A	11458.000	<	0.00476	2.30931		0.02806
A/S-1B	10540.000		0.00904	2.52972		0.02814
A/S-1C	10886.000	<	0.00520	2.54072		0.02716
			0.00904 AVG	2.45991 AVG		0.02778 AVG
			0.000000 SD	0.130547 SD		0.000544 SD
			0.000000 %RSD	5.306973 %RSD		1.956894 %RSD
A/S-2A	9714.000		0.00865	2.30801		0.02550
A/S-2B	8796.000		0.00758	2.39570		0.02706
A/S-2C	12566.000		0.01027	2.61192		0.02844
			0.00883 AVG	2.43854 AVG		0.02700 AVG
			0.001352 SD	0.156421 SD		0.001476 SD
			15.313597 %RSD	6.414535 %RSD		5.465885 %RSD
A/S-3A	11987.000	<	0.00462	2.22261		0.02769
A/S-3B	13270.000		0.00967	2.53531		0.02974
A/S-3C	11676.000		0.01315	2.75074		0.02659
			0.01141 AVG	2.50289 AVG		0.02801 AVG
			0.007222 SD	0.265551 SD		0.001599 SD
			63.296921 %RSD	10.609789 %RSD		5.708892 %RSD
A/S-4A	13736.000	<	0.00450	2.31571		0.04287
A/S-4B	11244.000	<	0.00528	2.57187		0.04424
A/S-4C	12130.000		0.00550	2.66277		0.05153

```
                                      0. 00550 AVG      2. 51678 AVG      0. 04621 AVG
                                      0. 000000 SD      0. 179965 SD      0. 004657 SD
                                      0. 000000 %RSD    7. 15    0 %RSD   10. 078029 %RSD

  A/S-5A     11543. 000    <    0. 00491           2. 30162          0. 04375
  A/S-5B     12023. 000    <    0. 00281           2. 38815          0. 03723
  A/S-5C     10971. 000    <    0. 00543           2. 57047          0. 04572

                                      0. 00000 AVG      2. 42008 AVG      0. 04224 AVG
                                      0. 000000 SD      0. 137236 SD      0. 004445 SD
                                      0. 000000 %RSD    5. 670712 %RSD    10. 523463 %RSD

  A/S-6A     15409. 000    <    0. 00249           2. 30751          0. 04069
  A/S-6B     11218. 000    <    0. 00649           2. 42046          0. 03547
  A/S-6C     12582. 000    <    0. 00779           2. 47373          0. 03955

                                      0. 00714 AVG      2. 40057 AVG      0. 03857 AVG
                                      0. 004737 SD      0. 084879 SD      0. 002744 SD
                                     66. 339775 %RSD    3. 535807 %RSD    7. 115449 %RSD

  A/S-7A     12640. 000    <    0. 00289           2. 39197          0. 03422
  A/S-7B     13536. 000    <    0. 00482           2. 44615          0. 04423
  A/S-7C     11884. 000         0. 00669           2. 68944          0. 04715

                                      0. 00669 AVG      2. 50919 AVG      0. 04187 AVG
                                      0. 000000 SD      0. 158438 SD      0. 006781 SD
                                      0. 000000 %RSD    6. 314322 %RSD    16. 197462 %RSD

  S626A      9670. 000         0. 07796           0. 71890     <    0. 00502
  S626B      8226. 000         0. 07806           0. 72148     <    0. 00616
  S626C      8418. 000         0. 08740           0. 79655     <    0. 00876

                                      0. 08114 AVG      0. 74564 AVG      0. 00000 AVG
                                      0. 005421 SD      0. 044108 SD      0. 000000 SD
                                      6. 680753 %RSD    5. 915433 %RSD    0. 000000 %RSD

  S604A      8455. 000         0. 00681           1. 73770          0. 09011
  S604B      7462. 000    <    0. 00601           1. 86272          0. 09857
  S604C      8039. 000    <    0. 00618           2. 01462          0. 11232

                                      0. 00681 AVG      1. 871.68 AVG     0. 10033 AVG
                                      0. 000000 SD      0. 138680 SD      0. 011212 SD
                                      0. 000000 %RSD    7. 409386 %RSD    11. 174778 %RSD
```

#10
Reprint

1

```
(TI)TITLE:
  91119065 RF LEAD
(LN)LIBRARY:                    .
(SA)SAMPLE TIME:   7JAN80   1153:00
(SE)STD ENERGY TOLERANCE:     2.00
(UE)UNK ENERGY TOLERANCE:     2.00
(TF)THERMAL FLUX:  0.0000E-01
(EF)EPITHERMAL FLUX:  0.0000E-01
(FF)FAST FLUX:  0.0000E-01
(QU)UNITS:   UG


      ELEMENT       ENERGY     HALF-LIFE       SEC:
  1  %-COPPER       511.00   1.2800E 01 H   4.6080E 04
  2  %-ANTIMONY     564.09   2.7200E 00 D   2.3501E 05
  3  %-ARSENIC      657.41   2.6300E 01 H   9.4680E 04


                      STANDARD SAMPLES

        NAME          MASS        FILE      POWER   ACT TIME
  1  S626A          9670.00 FB11   .A01     100.0   100000.0
  2  S626B          8226.00 FB11   .A02     100.0   100000.0
  3  S604A          8455.00 FB11   .A04     100.0   100000.0
  4  S604B          7462.00 FB11   .A05     100.0   100000.0
  5  S604C          8039.00 FB11   .A06     100.0   100000.0


 STD:  1  S626A               FILE= FB11   .A01

      ELEMENT       ENERGY     CONC         ERROR
  1  %-COPPER       511.00   7.8000E-02 0.0000E-01
  2  %-ANTIMONY     564.09   7.2000E-01 0.0000E-01
  3  %-ARSENIC      657.41   0.0000E-01 0.0000E-01


 STD:  2  S626B               FILE= FB11   .A02

      ELEMENT       ENERGY     CONC         ERROR
  1  %-COPPER       511.00   7.8000E-02 0.0000E-01
  2  %-ANTIMONY     564.09   7.2000E-01 0.0000E-01
  3  %-ARSENIC      657.41   0.0000E-01 0.0000E-01


 STD:  3  S604A               FILE= FB11   .A04

      ELEMENT       ENERGY     CONC         ERROR
  1  %-COPPER       511.00   0.0000E-01 0.0000E-01
  2  %-ANTIMONY     564.09   0.0000E-01 0.0000E-01
  3  %-ARSENIC      657.41   1.0000E-01 0.0000E-01


 STD:  4  S604B               FILE= FB11   .A05

      ELEMENT       ENERGY     CONC         ERROR
  1  %-COPPER       511.00   0.0000E-01 0.0000E-01
  2  %-ANTIMONY     564.09   0.0000E-01 0.0000E-01
  3  %-ARSENIC      657.41   1.0000E-01 0.0000E-01


 STD:  5  S604C               FILE= FB11   .A06
```

	ELEMENT	ENERGY	CONC	ERROR
1	%-COPPER	511.00	0.0000E-01	0.0000E-01
2	%-ANTIMONY	564.6	0.0000E-01	0.0000E-01
3	%-ARSENIC	657.41	1.0000E-01	0.0000E-01

UNKNOWN SAMPLES

	NAME	MASS	FILE	POWER	ACT TIME
1	Q328A	17029.00	FBI1 .A07	100.0	100000.0
2	Q228B	12277.00	FBI1 .A08	100.0	100000.0
3	Q328C	11861.00	FBI1 .A09	100.0	100000.0
4	Q329A	11684.00	FBI1 .A10	100.0	100000.0
5	Q329B	13842.00	FBI1 .A11	100.0	100000.0
6	Q329C	11563.00	FBI1 .A12	100.0	100000.0
7	Q330A	12210.00	FBI1 .A13	100.0	100000.0
8	Q330B	10673.00	FBI1 .A14	100.0	100000.0
9	Q330C	13097.00	FBI1 .A15	100.0	100000.0
10	Q331A	8011.00	FBI1 .A16	100.0	100000.0
11	Q331B	9696.00	FBI1 .A17	100.0	100000.0
12	Q331C	10386.00	FBI1 .A18	100.0	100000.0
13	Q332A	11093.00	FBI1 .A19	100.0	100000.0
14	Q332B	12522.00	FBI1 .A20	100.0	100000.0
15	Q332C	9862.00	FBI1 .A21	100.0	100000.0
16	Q333A	12598.00	FBI1 .A22	100.0	100000.0
17	Q333B	11767.00	FBI1 .A23	100.0	100000.0
18	Q333C	11840.00	FBI1 .A24	100.0	100000.0
19	Q334A	9873.00	FBI1 .A25	100.0	100000.0
20	Q334B	11470.00	FBI1 .A26	100.0	100000.0
21	Q334C	13249.00	FBI1 .A27	100.0	100000.0
22	Q335A	11855.00	FBI1 .A28	100.0	100000.0
23	Q335B	14080.00	FBI1 .A29	100.0	100000.0
24	Q335C	9464.00	FBI1 .A30	100.0	100000.0
25	Q336A	8158.00	FBI1 .A31	100.0	100000.0
26	Q336B	10453.00	FBI1 .A32	100.0	100000.0
27	Q336C	11304.00	FBI1 .A33	100.0	100000.0
28	Q337A	9607.00	FBI1 .A34	100.0	100000.0
29	Q337B	10572.00	FBI1 .A35	100.0	100000.0
30	Q337C	9809.00	FBI1 .A36	100.0	100000.0
31	Q338A	11368.00	FBI1 .A37	100.0	100000.0
32	Q338B	11406.00	FBI1 .A38	100.0	100000.0
33	Q338C	14742.00	FBI1 .A39	100.0	100000.0
34	Q339A	9328.00	FBI1 .A40	100.0	100000.0
35	Q339B	13724.00	FBI1 .A41	100.0	100000.0
36	Q339C	10783.00	FBI1 .A42	100.0	100000.0
37	Q340A	9980.00	FBI1 .A43	100.0	100000.0
38	Q340B	13486.00	FBI1 .A44	100.0	100000.0
39	Q340C	10947.00	FBI1 .A45	100.0	100000.0
40	Q358A	11667.00	FBI1 .A46	100.0	100000.0
41	Q358B	11868.00	FBI1 .A47	100.0	100000.0
42	Q358C	13447.00	FBI1 .A48	100.0	100000.0
43	Q359A	12453.00	FBI1 .A49	100.0	100000.0
44	Q359B	12274.00	FBI1 .A50	100.0	100000.0
45	Q359C	12112.00	FBI1 .A51	100.0	100000.0
46	Q360A	10138.00	FBI1 .A52	100.0	100000.0
47	Q360B	12238.00	FBI1 .A53	100.0	100000.0
48	Q360C	9200.00	FBI1 .A54	100.0	100000.0
49	Q361A	12504.00	FBI1 .A55	100.0	100000.0
50	Q361B	9414.00	FBI1 .A56	100.0	100000.0
51	Q361C	12549.00	FBI1 .A57	100.0	100000.0
52	Q362A	11345.00	FBI1 .A58	100.0	100000.0
53	Q362B	14529.00	FBI1 .A59	100.0	100000.0
54	Q362C	13393.00	FBI1 .A60	100.0	100000.0
55	A/S-1A	11458.00	FBI1 .A61	100.0	100000.0
56	A/S-1B	10540.00	FBI1 .A62	100.0	100000.0
57	A/S-1C	10995.00	FBI1 .A63	100.0	100000.0

58	A/S-2A	9714.00	FB11	.A64	100.0	100000.0
59	A/S-2B	8796.00	FBI1	.A65	100.0	100000.0
60	A/S-2C	1⬤6.00	FBI1	.A66	100.0	⬤00000.0
61	A/S-3A	11987.00	FBI1	.A67	100.0	100000.0
62	A/S-3B	13270.00	FB11	.A68	100.0	100000.0
63	A/S-3C	11676.00	FB11	.A69	100.0	100000.0
64	A/S-4A	13736.00	FB11	.A70	100.0	100000.0
65	A/S-4B	11244.00	FBI1	.A71	100.0	100000.0
66	A/S-4C	12130.00	FB11	.A72	100.0	100000.0
67	A/S-5A	11543.00	FB11	.A73	100.0	100000.0
68	A/S-5B	12023.00	FBI1	.A74	100.0	100000.0
69	A/S-5C	10971.00	FB11	.A75	100.0	100000.0
70	A/S-6A	15409.00	FBI1	.A76	100.0	100000.0
71	A/S-6B	11218.00	FBI1	.A77	100.0	100000.0
72	A/S-6C	12582.00	FBI1	.A78	100.0	100000.0
73	A/S-7A	12640.00	FBI1	.A79	100.0	100000.0
74	A/S-7B	13536.00	FBI1	.A80	100.0	100000.0
75	A/S-7C	11884.00	FBI1	.A81	100.0	100000.0
76	S626A	9670.00	FBI1	.A01	100.0	100000.0
77	S626B	8226.00	FBI1	.A02	100.0	100000.0
78	S626C	8418.00	FBI1	.A03	100.0	100000.0
79	S604A	8455.00	FBI1	.A04	100.0	100000.0
80	S604B	7462.00	FB11	.A05	100.0	100000.0
81	S604C	8039.00	FB11	.A06	100.0	100000.0

```
***********************************************************************
******************* 10 JAN 1980  9:33:52 AM  ***********************
***********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  S626A
TYPE OF SAMPLE:  STANDARD
SAMPLE QUANTITY:  9670.000       UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1545:57 * FWHM(1332)          2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:         5.000
ELAPSED REAL TIME:      610. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:    10.
                                   *
***********************************************************************
                                   *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:       -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                                   *
***********************************************************************



        ENERGY WINDOW    499.787 TO    674.920

 PK IT  ENERGY    AREA    BKGND   FWHM  CHANNEL LEFT PW  CTS/SEC   %ERR    FIT

  1  1  511.04    4113.   1837.   2.82  1022.48 1012  22 6.855E 00   2.1 1.32E 00
  2  1  564.22   71035.   2508.   1.95  1128.76 1120  19 1.184E 02   0.4 6.89E 01
  3  1  602.83    2494.    330.   2.05  1205.92 1197  20 4.156E 00   2.3 1.26E 00
  4  1  646.14     164.    199.   2.09  1292.49 1286  15 2.730E-01  14.5 6.24E-01



     PEAK SEARCH COMPLETED





     STANDARD REPORT:


 ELEMENT        ENERGY   AREA    CONCENTR.    ERROR     CONSTANT      ERROR
                                            (1 SIGMA)              (1 SIGMA)
 %-COPPER       511.0    4113.  7.8000E-02 0.0000E-01 4.1312E-02 8.8635E-04
 %-ANTIMONY     564.1   71035.  7.2000E-01 0.0000E-01 2.2882E-02 8.8835E-05
 %-ARSENIC      657.4       0.  0.0000E-01 0.0000E-01 0.0000E-01 0.0000E-01
```

```
****************************************************************
******************* 10 ● 1980  9:34:55 AM    ******●***********
****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   5626B
TYPE OF SAMPLE:   STANDARD
SAMPLE QUANTITY:    8226.000         UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
****************************************************************
                                        *
ACQUISITION DATE:  8JAN80 1556:19  * FWHM(1332)         2.390
PRESET TIME(LIVE):      300. SEC   * SENSITIVITY:       5.000
ELAPSED REAL TIME:      531. SEC   * SHAPE PARAMETER :  15.0 %
ELAPSED LIVE TIME:      524. SEC   * NBR ITERATIONS:   10.
                                        *
****************************************************************
                                        *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV      * ABUNDANCE LIMIT:   85.00%
                                        *
****************************************************************


            ENERGY WINDOW    499.787 TO    674.920

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR      FIT

  1  1  511.03     3033.     1354.    2.91  1022.48 1012   21 5.788E 00   2.5 1.28E 00
  2  1  564.21    52872.     1692.    1.94  1128.74 1120   18 1.009E 02   0.4 5.45E 01
  3  1  602.84     1868.      259.    2.05  1205.95 1195   23 3.566E 00   2.6 4.73E 00
  4  1  638.53       68.      165.    2.65  1277.27 1272   14 1.306E-01  29.1 4.26E 00
  5  1  645.88      105.      365.    2.13  1291.96 1287   27 2.012E-01  27.4 3.31E 00


      PEAK SEARCH COMPLETED
```

STANDARD REPORT:

ELEMENT	ENERGY	AREA	CONCENTR.	ERROR (1 SIGMA)	CONSTANT	ERROR (1 SIGMA)
%-COPPER	511.0	3033.	7.8000E-02	0.0000E-01	4.1365E-02	1.0335E-03
%-ANTIMONY	564.1	52872.	7.2000E-01	0.0000E-01	2.2965E-02	1.0302E-04
%-ARSENIC	657.4	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01

```
*******************************************************************
******************* 10 J█N 1980  9:35:59 AM  *****●***********
*******************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  S604A
TYPE OF SAMPLE:  STANDARD
SAMPLE QUANTITY: · 8455.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*******************************************************************
                                    *
ACQUISITION DATE:  8JAN80 1610:44 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:      620. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                    *
*******************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                    *
*******************************************************************


          ENERGY WINDOW    499.787 TO    674.920

 PK IT  ENERGY    AREA      BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR    FIT

  1  1  511.64    307.      2373.   2.49  1023.69 1017  12 5.118E-01 23.1 2.03E 00
  2  3  559.32    12062.    1428.   2.40  1118.97 1107  35 2.010E 01  1.0 7.01E 01
  3  3  564.20    149470.    895.   1.97  1128.72 1107  35 2.491E 02  0.3
  4  1  602.86    5139.      971.   2.03  1205.99 1194  21 8.566E 00  1.6 4.65E 00
  5  1  646.08    351.       546.   1.80  1292.37 1286  14 5.852E-01 10.8 1.26E 00
  6  1  657.19    1037.      695.   2.11  1314.57 1303  20 1.728E 00  4.8 1.64E 00


    PEAK SEARCH COMPLETED




STANDARD REPORT:

ELEMENT      ENERGY   AREA     CONCENTR.    ERROR     CONSTANT       ERROR
                                          (1 SIGMA)              (1 SIGMA)
%-COPPER     511.0      0.   0.0000E-01 0.0000E-01 0.0000E-01 0.0000E-01
%-ANTIMONY   564.1      0.   0.0000E-01 0.0000E-01 0.0000E-01 0.0000E-01
%-ARSENIC    657.4    1037.  1.0000E-01 0.0000E-01 4.3173E-03 2.0513E-04
```

91119065 RF LEAD

SAMPLE DATE: 7JAN80 1153:00
SAMPLE IDENTIFICATION: S604B
TYPE OF SAMPLE: STANDARD
SAMPLE QUANTITY: 7462.000   UNITS: UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME: EFF.TAB1

```
***********************************************************************
                                     *
ACQUISITION DATE:  8JAN80 1621:18 * FWHM(1332)          2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:         5.000
ELAPSED REAL TIME:       619. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                  *
***********************************************************************
                                     *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                     *
***********************************************************************
```

ENERGY WINDOW   499.787 TO   674.920

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR	FIT
1	3	559.33	10887.	1514.	2.40	1119.00	1109	29	1.814E 01	1.1	8.94E 01
2	3	564.20	141143.	882.	1.99	1128.72	1109	29	2.352E 02	0.3	
3	1	602.88	4694.	803.	1.99	1206.03	1197	19	7.824E 00	1.7	3.62E 00
4	1	646.03	259.	560.	1.91	1292.27	1285	14	4.318E-01	14.3	1.11E 00
5	1	657.12	996.	516.	1.99	1314.42	1307	16	1.660E 00	4.5	1.21E 00

PEAK SEARCH COMPLETED

STANDARD REPORT:

ELEMENT	ENERGY	AREA	CONCENTR.	ERROR (1 SIGMA)	CONSTANT	ERROR (1 SIGMA)
%-COPPER	511.0	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
%-ANTIMONY	564.1	0.	0.0000E-01	0.0000E-01	0.0000E-01	0.0000E-01
%-ARSENIC	657.4	996.	1.0000E-01	0.0000E-01	4.7223E-03	2.1348E-04

```
******************************************************************
***************** 10 ● 1980  9:38:01 AM  ●●●●● ●●●●●●●●●●●●
******************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  S604C
TYPE OF SAMPLE:  STANDARD
SAMPLE QUANTITY:    8039.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
******************************************************************
                                 *
ACQUISITION DATE:  8JAN80 1631:47 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      623. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                 *
******************************************************************
                                 *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                 *
******************************************************************


          ENERGY WINDOW    499.787 TO    674.920

 PK IT  ENERGY    AREA      BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR     FIT

  1  3  559.33   13441.     1726.   2.42  1119.00 1108   34 2.240E 01   1.0 8.00E 01
  2  3  564.19  164151.     1067.   1.99  1128.71 1108   34 2.736E 02   0.2
  3  1  602.88    5614.     1021.   1.97  1206.04 1196   19 9.356E 00   1.6 5.37E 00
  4  1  645.97     329.      808.   1.94  1292.15 1286   17 5.476E-01  13.4 1.88E 00
  5  1  657.28    1217.      575.   2.23  1314.74 1305   19 2.029E 00   4.0 1.85E 00


     PEAK SEARCH COMPLETED




STANDARD REPORT:

ELEMENT       ENERGY  AREA    CONCENTR.    ERROR    CONSTANT      ERROR
                                         (1 SIGMA)             (1 SIGMA)
%-COPPER       511.0     0.  0.0000E-01 0.0000E-01 0.0000E-01 0.0000E-01
%-ANTIMONY     564.1     0.  0.0000E-01 0.0000E-01 0.0000F-01 0.0000E-01
%-ARSENIC      657.4  1217.  1.0000E-01 0.0000E-01 5.3816E-03 2.1505E-04
```

SUMMARY OF STANDARD CONSTANTS:

1. ELEMENT %-COPPER   AT   511.00 KEV

   STANDARD NAME   CONCENTR.   CONSTANT   ERROR
                                                      (1 SIGMA)
   S626A   7.8000E-02   4.1312E-02   8.8635E-04
   S626B   7.8000E-02   4.1365E-02   1.0335E-03

   MEAN CONSTANT,   2 STDS: 4.1335E-02   6.7281E-04

2. ELEMENT %-ANTIMONY   AT   564.09 KEV

   STANDARD NAME   CONCENTR.   CONSTANT   ERROR
                                                      (1 SIGMA)
   S626A   7.2000E-01   2.2882E-02   8.8835E-05
   S626B   7.2000E-01   2.2965E-02   1.0302E-04

   MEAN CONSTANT,   2 STDS: 2.2917E-02   6.7276E-05

3. ELEMENT %-ARSENIC   AT   657.41 KEV

   STANDARD NAME   CONCENTR.   CONSTANT   ERROR
                                                      (1 SIGMA)
   S604A   1.0000E-01   4.3173E-03   2.0513E-04
   S604B   1.0000E-01   4.7223E-03   2.1348E-04
   S604C   1.0000E-01   5.3816E-03   2.1505E-04

   MEAN CONSTANT,   3 STDS: 4.7911E-03   1.2187E-04

```
*****************************************************************
***************** 10 JAN 1980  9:39:24 AM  ******************
*****************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q328A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   17029.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                  *
ACQUISITION DATE:  7JAN80 1519:58 * FWHM(1332)       2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:     5.000
ELAPSED REAL TIME:      674. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:  10.
                                  *
*****************************************************************
                                  *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                  *
*****************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                 1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
--------------------------------------------------------------------------

%-COPPER        511.0    13922.    10183.     0.0292    0.0007      2.5
%-ANTIMONY      564.1    20874.   556234.     2.4665    0.0080      0.3
%-ARSENIC       657.4     2558.       0. <    0.0053    NOT DETECTABLE

 1009:  752.   795.   762.   801.   771.   798.   758.   807.   985.
 1018: 1046.  1442.  1752.  2084.  2442.  2388.  2091.  1637.  1277.
 1027:  955.   869.   730.   740.   720.   691.   671.   663.   662.

 1117: 1100.  1163.  1263.  1424.  1647.  2067.  3063.  6365. 17756.
 1126:44274. 85353.123041.131533. 94777. 44600. 13128.  3186.  1378.
 1135:  975.   901.   813.   777.   707.   625.   666.   610.   626.

 1301:  233.   235.   195.   187.   207.   191.   191.   169.   222.
 1310:  179.   201.   207.   209.   178.   193.   200.   194.   182.
 1319:  209.   200.   184.   176.   187.   193.   185.   168.   181.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1. 511.00   10183.    13922.    2.85 1022.40 1014  19 1.697E 01   1.9
 2  1. 564.12  556234.    20874.    1.98 1128.56 1117  24 9.271E 02   0.1
 3  1. 602.77   14560.     4990.    1.99 1205.81 1197  17 2.427E 01   1.1
 4  1. 645.97    1020.     2753.    2.01 1292.14 1286  13 1.700E 00   7.9
```

```
****************************************************************
***************** 10 J██ 1980  9:40:29 AM  ***** ████**********
****************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  0228B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:  12277.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***************************************************************
                                *
ACQUISITION DATE:  7JAN80 1531:26 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      658. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:    10.
                                *
***************************************************************
                                *
DETECTOR: GEL1-8                * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                *
***************************************************************


UNKNOWN SAMPLE REPORT


                   PEAK                              1 SIGMA
ELEMENT           ENERGY    BKGND      AREA     CONCENTR.     ERROR        %ERROR
---------------------------------------------------------------------------------

%-COPPER          511.0    10233.     8067.     0.0324     0.0009          2.7
%-ANTIMONY        564.1    14938.   442364.     2.7263     0.0091          0.3
%-ARSENIC         657.4     1703.       0. <    0.0061     NOT DETECTABLE

 1009:  581.   606.   659.   583.   609.   574.   622.   668.   733.
 1018:  866.  1164.  1335.  1682.  1870.  1824.  1646.  1258.   991.
 1027:  740.   646.   599.   557.   533.   558.   577.   505.   546.

 1117:  927.   892.  1071.  1109.  1263.  1594.  2283.  4926. 13572.
 1126:34338. 67154. 98524.104706. 76826. 35610. 10409.  2282.   888.
 1135:  660.   607.   526.   482.   440.   457.   411.   442.   395.

 1301:  168.   154.   134.   128.   145.   139.   134.   152.   141.
 1310:  145.   138.   130.   126.   127.   115.   134.   134.   147.
 1319:  138.   113.   115.   117.   139.   142.   142.   141.   109.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  510.97     8067.    10233.    2.93  1022.34 1014  18 1.345E 01   2.1
  2  1  564.13   442364.    14938.    1.97  1128.58 1118  22 7.373E 02   0.2
  3  1  602.77    11583.     3553.    1.99  1205.81 1196  19 1.930E 01   1.2
  4  1  645.96      832.     1782.    2.15  1292.13 1286  12 1.387E 00   8.0
```

```
91119065 RF LEAD
```

```
SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q328C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11861.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*******************************************************************
                               *
ACQUISITION DATE:  7JAN80 1542:37 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       658. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                               *
*******************************************************************
                               *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:          0.5003803      * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                               *
*******************************************************************
```

```
UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	11482.	8269.	0.0348	0.0009	2.7
%-ANTIMONY	564.1	14516.	448107.	2.8642	0.0095	0.3
%-ARSENIC	657.4	1736.	0. <	0.0064	NOT DETECTABLE	

```
1009:  668.   623.   547.   589.   589.   611.   593.   691.   755.
1018:  864.  1035.  1370.  1681.  1848.  1830.  1672.  1349.  986.
1027:  785.   642.   569.   562.   560.   517.   528.   481.   482.

1117:  908.   909.  1066.  1115.  1334.  1646.  2430.  5112. 13981.
1126:35313. 69052. 99720.106229. 76504. 35810. 10071.  2251.  891.
1135:  649.   576.   527.   519.   472.   458.   407.   435.   394.

1301:  156.   134.   130.   133.   139.   134.   142.   115.   133.
1310:  134.   135.   142.   148.   133.   137.   141.   117.   122.
1319:  142.   124.   128.   105.   112.   133.   118.   112.   128.
        PULSE-PILE-UP CORRECTED DATA. CORRECTION = 1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.03	8269.	11482.	2.93	1022.48	1013	21	1.378E 01	2.1
2	1	564.12	448107.	14516.	1.97	1128.56	1117	21	7.468E 02	0.2
3	1	602.77	11790.	3905.	2.00	1205.81	1195	19	1.965E 01	1.2
4	1	645.85	892.	2401.	2.19	1291.90	1284	17	1.487E 00	8.5

```
*****************************************************************
****************** 10 JAN 1980   9:42:37 AM   ******************
*****************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q329A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11684.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                               *
ACQUISITION DATE:  7JAN80 1553:47 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:      608. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                               *
*****************************************************************
                               *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:       -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                               *
*****************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.  ERROR      %ERROR
-----------------------------------------------------------------------

%-COPPER        511.0     1465.     2921.     0.0126    0.0004      3.1
%-ANTIMONY      564.2     1916.    51311.     0.3336    0.0018      0.5
%-ARSENIC       657.4      243.       0.  <   0.0025    NOT DETECTABLE

  1009:   78.    63.    77.    81.    78.    86.    64.   102.   118.
  1018:  164.   269.   329.   474.   508.   521.   434.   367.   249.
  1027:  163.   123.    92.    61.    76.    73.    61.    65.    74.

  1117:  123.   145.   162.   148.   163.   206.   268.   509.  1455.
  1126: 3797.  7427. 11241. 12446.  9312.  4375.  1255.   247.    59.
  1135:   30.    27.    28.    18.    19.    27.    28.    35.    31.

  1301:   19.    19.    21.    25.    21.    19.    19.    16.    19.
  1310:   21.    20.    20.    20.    29.    15.    24.    15.    13.
  1319:   14.    11.    22.    15.    21.    18.    22.    17.    21.
        PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA    BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

  1  1  511.04   2921.    1465.   3.07  1022.49 1013   20 4.868E 00  2.6
  2  1  564.17  51311.    1916.   1.95  1128.66 1120   21 8.552E 01  0.5
  3  1  602.84   1433.     344.   1.93  1205.94 1199   16 2.389E 00  3.2
```

91119065 RF LEAD

SAMPLE DATE: 7JAN80 11.53:00
SAMPLE IDENTIFICATION: Q329B
TYPE OF SAMPLE: UNKNOWN
SAMPLE QUANTITY: 13842.00   UNITS: UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME: EFF.TAB1

```
***************************************************************
                               *
```
ACQUISITION DATE: 7JAN80 1604:10 * FWHM(1332)   2.390
PRESET TIME(LIVE):   600. SEC * SENSITIVITY: 5.000
ELAPSED REAL TIME: 609. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME: 600. SEC * NBR ITERATIONS: 10.
```
                               *
***************************************************************
                               *
```
DETECTOR: GELI-8   * LIBRARY:NUCL.LIB1
DATE CALIBRATED: 26OCT79 1434:06 * ENERGY TOLERANCE: 2.000KV
KEV/CHNL: 0.5003803   * HALF LIFE RATIO: 8.00
OFFSET: -0.5932283 KEV   * ABUNDANCE LIMIT: 85.00%
```
                               *
***************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.1	1898.	3790.	0.0139	0.0004	2.8
%-ANTIMONY	564.2	2025.	63972.	0.3517	0.0018	0.5
%-ARSENIC	657.4	296.	0. <	0.0023	NOT DETECTABLE	

```
1009:   77.    95.    80.   1.04.    99.    85.    91.    122.   151.
1018:  227.   312.   438.   609.    681.   670.   607.    465.   315.
1027:  211.   132.    98.    91.     86.    87.     61.     74.    68.

1117:  136.   154.   200.   189.    202.   216.   340.    636. 1773.
1126: 4630.  9359. 14151. 15596.  11615. 5321.  1529.    257.    54.
1135:   40.    37.    32.    29.     42.    29.    27.     26.    29.

1301:   22.    26.    22.    18.     27.    19.    18.     11.    11.
1310:   27.    21.    22.    26.     19.    21.    29.     17.    31.
1319:   20.    22.    30.    21.     17.    24.    16.     17.    27.
```
          PULSE-PILE-UP CORRECTED DATA. CORRECTION = 1.000

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.07	3790.	1898.	2.94	1022.56	1013	22	6.316E 00	2.3
2	1	564.16	63972.	2025.	1.94	1128.66	1120	18	1.066E 02	0.4
3	1	602.83	1662.	475.	1.91	1205.92	1197	19	2.771E 00	3.1

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q329C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    11563.00          UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                     *
ACQUISITION DATE:  7JAN80 1614:32 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        608. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                     *
*********************************************************************
                                     *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                                     *
*********************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                                1 SIGMA
ELEMENT          ENERGY    BKGND      AREA      CONCENTR.    ERROR        %ERROR
-------------------------------------------------------------------------------

%-COPPER         511.0     2086.     3270.     0.0145     0.0004          3.1
 %-ANTIMONY      564.2     1854.    57612.     0.3799     0.0020          0.5
 %-ARSENIC       657.4      215.       0. <    0.0024     NOT DETECTABLE

 1009:   86.     80.      72.     82.     88.     96.    101.    108.    156.
 1018:  208.    262.     379.    534.    603.    602.    513.    390.    255.
 1027:  159.    107.      98.     80.     81.     83.     74.     75.     72.

 1117:  132.    156.     167.    182.    181.    205.    292.    560.   1596.
 1126: 4119.   8502.   12720.  14044.  10384.  4905.   1236.    205.     55.
 1135:   34.     26.      33.     30.     30.     31.     15.     22.     21.

 1301:   13.     24.      17.     18.      9.     22.     18.     13.     21.
 1310:   13.     15.      15.     18.     22.     14.     11.     23.     17.
 1319:   19.     15.      12.     18.     14.     22.     24.     12.     20.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC     %ERR

 1  1  511.02     3270.     2086.    2.89  1022.44 1012   27 5.450E 00   2.6
 2  1  564.16    57612.     1854.    1.94  1128.66 1120   18 9.602E 01   0.4
 3  1  602.83     1556.      281.    1.95  1205.93 1199   15 2.593E 00   3.0
 4  1  646.17      193.      242.    4.08  1292.55 1284   17 3.215E-01  13.5
```

```
***********************************************************************
****************** 10 JAN 1980  9:45:55 AM  ******●*********
***********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q330A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   12210.00          UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
***********************************************************************
                                    *
ACQUISITION DATE:  7JAN80 1624:54 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      616. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                    *
***********************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                    *
***********************************************************************


UNKNOWN SAMPLE REPORT

                   PEAK                                 1 SIGMA
ELEMENT           ENERGY    BKGND      AREA    CONCENTR.   ERROR       %ERROR
-----------------------------------------------------------------------------

%-COPPER          511.0     3059.     7109.    0.0301     0.0007        2.3
%-ANTIMONY        564.2      710.   106519.    0.6663     0.0028        0.4
%-ARSENIC         657.2      608.      384.    0.0124     0.0013       10.7

 1009:   165.   140.   152.   138.   152.   176.   193.   209.   274.
 1018:   364.   604.   835.  1063.  1245.  1213.  1110.   787.   538.
 1027:   338.   217.   180.   153.   156.   151.   136.   116.   126.

 1117:   731.  1019.  1160.   955.   607.   477.   518.  1014.  2829.
 1126:  7601. 15580. 23397. 25858. 19170.  8943.  2400.   457.   130.
 1135:    79.    66.    61.    48.    74.    53.    40.    52.    59.

 1301:    29.    22.    31.    35.    24.    21.    29.    33.    31.
 1310:    40.    41.    64.    93.   113.   126.    96.    57.    41.
 1319:    30.    31.    31.    26.    36.    20.    27.    29.    22.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT   ENERGY      AREA     BKGND   FWHM  CHANNEL LEFT PW  CTS/SEC    %ERR

 1  1   511.02     7109.     3059.   2.99  1022.46 1012  23 1.185E 01   1.6
 2  4   559.41     5428.     1315.   2.70  1119.15 1110  33 9.047E 00   1.7
 3  4   564.16   106519.      710.   1.94  1128.65 1110  33 1.775E 02   0.3
 4  1   602.78     2776.      984.   2.01  1205.83 1195  24 4.627E 00   2.5
 5  1   646.08      255.      303.   2.56  1292.37 1287  11 4.257E-01  11.5
 6  1   657.18      384.      608.   1.95  1314.54 1304  19 6.402E-01  10.4
```

```
*************************************************************************
*****************   10 JAN 1980   9:47:03 AM   **************************
*************************************************************************
```

911.19065 RF LEAD

SAMPLE DATE: 7JAN80 1153:00
SAMPLE IDENTIFICATION: Q330B
TYPE OF SAMPLE: UNKNOWN
SAMPLE QUANTITY: 10673.00   UNITS: UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME: EFF.TAB1

```
*************************************************************************
                                    *
```
ACQUISITION DATE: 7JAN80 1635:24 * FWHM(1332)   2.390
PRESET TIME(LIVE):   600. SEC * SENSITIVITY: 5.000
ELAPSED REAL TIME: 613. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME: 600. SEC * NBR ITERATIONS: 10.
```
                                    *
*************************************************************************
                                    *
```
DETECTOR: GEL1-8   * LIBRARY:NUCL.LIB1
DATE CALIBRATED: 26OCT79 1434:06 * ENERGY TOLERANCE: 2.000KV
KEV/CHNL: 0.5003803   * HALF LIFE RATIO: 8.00
OFFSET: -0.5932283 KEV   * ABUNDANCE LIMIT: 85.00%
```
                                    *
*************************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	2740.	6433.	0.0315	0.0007	2.4
%-ANTIMONY	564.2	569.	95989.	0.6882	0.0030	0.4
%-ARSENIC	657.1	388.	395.	0.0146	0.0013	9.0

1009:	142.	143.	155.	126.	145.	153.	163.	202.	232.
1018:	347.	509.	799.	1006.	1115.	1128.	1006.	761.	459.
1027:	297.	193.	147.	136.	141.	117.	124.	107.	142.
1117:	659.	930.	1008.	813.	573.	428.	509.	962.	2653.
1126:	6864.	13999.	21217.	23208.	17266.	7967.	2181.	379.	88.
1135:	71.	54.	48.	47.	47.	50.	50.	52.	52.
1301:	26.	22.	19.	25.	32.	22.	21.	26.	25.
1310:	28.	25.	61.	88.	94.	131.	76.	45.	26.
1319:	23.	25.	21.	19.	31.	19.	22.	29.	21.

PULSE-PILE-UP CORRECTED DATA: CORRECTION = 1.000

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.02	6433.	2740.	2.94	1022.45	1012	21	1.072E 01	1.7
2	5	559.41	5200.	1116.	2.94	1119.15	1107	35	8.667E 00	1.7
3	5	564.16	95989.	569.	1.94	1128.65	1107	35	1.600E 02	0.3
4	1	602.82	2561.	528.	1.91	1205.91	1197	16	4.268E 00	2.3
5	1	657.14	395.	388.	1.94	1314.46	1308	16	6.591E-01	8.7

```
******************************************************************
****************** 10 JAN 1980  9:48:15 AM  *********************
******************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  0330C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   13097.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
******************************************************************
                                    *
ACQUISITION DATE:  7JAN80 1645:50 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       618. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                    *
******************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803      * HALF LIFE RATIO:    8.00
OFFSET:           -0.5932283 KEV  * ABUNDANCE LIMIT:   85.00%
                                    *
******************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	3399.	8390.	0.0338	0.0007	2.2
%-ANTIMONY	564.1	772.	125269.	0.7332	0.0030	0.4
%-ARSENIC	657.2	1560.	461.	0.0140	0.0018	13.2

```
1009:   197.   189.   174.   174.   179.   180.   224.   230.   333.
1018:   471.   651.   991.  1334.  1526.  1476.  1314.   953.   608.
1027:   390.   271.   218.   184.   172.   140.   133.   137.   143.

1117:   834.  1188.  1278.  1094.   741.   568.   640.  1309.  3532.
1126:  9195. 18509. 27787. 30203. 22207. 10174.  2756.   511.   129.
1135:    88.    74.    71.    80.    71.    89.    65.    50.    72.

1301:    44.    41.    44.    31.    47.    38.    32.    26.    38.
1310:    31.    55.    81.   105.   136.   148.   113.    82.    47.
1319:    44.    31.    37.    40.    33.    21.    30.    29.    33.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.02	8390.	3399.	2.84	1022.45	1012	22	1.398E 01	1.5
2	5	559.42	6509.	1418.	2.87	1119.17	1107	32	1.085E 01	1.5
3	5	564.15	125269.	772.	1.94	1128.62	1107	32	2.088E 02	0.3
4	1	602.79	3304.	596.	1.95	1205.84	1198	15	5.507E 00	2.0
5	1	645.80	316.	504.	2.69	1291.80	1284	16	5.260E-01	11.5
6	1	657.21	461.	1560.	2.08	1314.60	1303	40	7.684E-01	13.0

91119065 RF LEAD

```
SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q331A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    8011.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                                    *
ACQUISITION DATE:  7JAN80 1656:21 * FWHM(1332)          2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:        5.000
ELAPSED REAL TIME:      609. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:    10.
                                    *
***********************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                                    *
***********************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	2314.	4609.	0.0306	0.0008	2.6
%-ANTIMONY	564.2	370.	67095.	0.6433	0.0031	0.5
%-ARSENIC	657.0	360.	152.	0.0075	0.0015	19.6

```
 1009:   96.   102.    95.    97.   112.    89.   147.   127.   174.
 1018:  251.   392.   512.   744.   813.   894.   692.   528.   317.
 1027:  208.   143.   105.    96.   103.    84.    95.    80.    79.

 1117:  321.   460.   489.   432.   289.   295.   346.   679.  1774.
 1126: 4853.  9907. 14696. 16329. 12033.  5452.  1491.   281.    61.
 1135:   38.    29.    31.    34.    36.    27.    31.    31.    23.

 1301:   12.    15.    28.    20.    20.    21.    26.    23.    30.
 1310:   24.    23.    27.    48.    55.    51.    40.    29.    18.
 1319:   17.    13.    17.    15.    24.    15.    24.    19.    22.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.01	4609.	2314.	2.81	1022.43	1012	26	7.682E 00	2.1
2	5	559.58	2563.	909.	3.19	1119.50	1111	26	4.272E 00	2.6
3	5	564.16	67095.	370.	1.93	1128.64	1111	26	1.118E 02	0.4
4	1	602.79	1751.	400.	1.90	1205.84	1197	16	2.919E 00	2.9
5	1	646.06	185.	268.	2.80	1292.32	1285	17	3.086E-01	14.5
6	1	656.99	152.	360.	2.07	1314.17	1306	18	2.526E-01	19.5

```
***********************************************************************
****************** 10 JAN 1980  9:50:33 AM   **************************
***********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 11:53:00
SAMPLE IDENTIFICATION:  0331B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    9696.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                                    *
ACQUISITION DATE:  7JAN80 1706:43 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                    *
***********************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                    *
***********************************************************************


UNKNOWN SAMPLE REPORT


                   PEAK                                  1 SIGMA
ELEMENT           ENERGY    BKGND      AREA     CONCENTR.  ERROR      %ERROR
---------------------------------------------------------------------------

%-COPPER          511.0     2639.      6013.    0.0333    0.0008       2.4
%-ANTIMONY        564.2      484.     85849.    0.6813    0.0031       0.5
%-ARSENIC         657.3      556.       226.    0.0093    0.0015      16.4

   1009:   136.   121.   139.   137.   122.   148.   149.   162.   209.
   1018:   319.   499.   702.   954.  1075.  1074.   968.   652.   437.
   1027:   266.   202.   143.   124.   115.   106.   104.    95.   111.

   1117:   382.   559.   625.   533.   417.   381.   448.   894.  2454.
   1126:  6190. 12589. 19024. 20869. 15165.  7091.  1912.   319.    80.
   1135:    41.    47.    50.    48.    45.    42.    41.    50.    40.

   1301:    14.    20.    22.    26.    18.    28.    28.    23.    21.
   1310:    27.    24.    41.    51.    69.    68.    52.    51.    40.
   1319:    23.    20.    16.    31.    26.    22.    13.    16.    26.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT   ENERGY     AREA      BKGND   FWHM  CHANNEL  LEFT PW   CTS/SEC    %ERR

 1  1  511.02     6013.     2639.   2.85  1022.45  1011   23 1.002E 01   1.8
 2  3  560.19     2303.      774.   2.43  1120.71  1107   31 3.839E 00   2.7
 3  3  564.15    85849.      484.   1.94  1128.63  1107   31 1.431E 02   0.3
 4  1  602.84     2309.      572.   2.04  1205.94  1194   21 3.849E 00   2.5
 5  1  645.90      175.      436.   2.72  1292.01  1283   16 2.919E-01  18.5
 6  1  657.35      226.      556.   2.39  1314.88  1308   25 3.774E-01  16.2
```

```
***********************************************************************
***************** 10 JAN 1980  9:51:40 AM  *********************
***********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q331C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   10386.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                              *
ACQUISITION DATE:  7JAN80 1717:09 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      614. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                              *
***********************************************************************
                              *
DETECTOR: GELI-8                  * LIBRARY:NUCL.L1B1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803      * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                              *
***********************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                              1 SIGMA
ELEMENT        ENERGY    BKGND      AREA    CONCENTR.    ERROR       %ERROR
-----------------------------------------------------------------------------

%-COPPER        511.0     2748.     6875.    0.0359      0.0008        2.3
%-ANTIMONY      564.2      586.    94385.    0.7005      0.0031        0.4
%-ARSENIC       657.3      283.      236.    0.0091      0.0011       12.3

  1009:   127.   133.   115.   155.   123.   159.   154.   213.   293.
  1018:   398.   554.   777.  1061.  1168.  1205.  1045.   704.   499.
  1027:   303.   200.   158.   140.   113.   118.   121.    95.   115.

  1117:   472.   626.   703.   571.   460.   387.   519.   905.  2713.
  1126:  681.8 13939. 20634. 22971. 16679.  7900.  2155.   357.    91.
  1135:    54.    56.    51.    44.    41.    45.    45.    48.    51.

  1301:    23.    28.    37.    20.    25.    19.    24.    28.    20.
  1310:    28.    19.    36.    57.    65.    71.    61.    33.    33.
  1319:    30.    26.    18.    21.    27.    21.    41.    25.    32.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT   ENERGY      AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1   510.99     6875.      2748.    2.96   1022.40 1011   24 1.146E 01    1.6
  2  6   559.58     3822.      1505.    3.51   1119.49 1111   26 6.371E 00    2.2
  3  6   564.16    94385.       586.    1.95   1128.64 1111   26 1.573E 02    0.3
  4  1   602.84     2518.       603.    1.96   1205.95 1197   19 4.196E 00    2.4
  5  1   645.96      122.       450.    2.22   1292.12 1288   15 2.036E-01   26.2
  6  1   657.32      236.       283.    2.33   1314.83 1309   13 3.933E-01   12.0
```

91119065 RF LEAD

```
SAMPLE DATE:    7JAN80 11:53:00
SAMPLE IDENTIFICATION:   Q332A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    11093.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
****************************************************************
                                    *
ACQUISITION DATE:  8JAN80 1117:43 * FWHM(1332)           2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:         5.000
ELAPSED REAL TIME:       609. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:     10.
                                    *
****************************************************************
                                    *
DETECTOR: GELI 1-8                * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                    *
****************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.		1 SIGMA ERROR		%ERROR
%-COPPER	511.1	1577.	1012.	0.0131		0.0009		6.6
%-ANTIMONY	564.2	422.	76010.	0.6395		0.0030		0.5
%-ARSENIC	657.4	279.	0. <	0.0047		NOT DETECTABLE		

```
 1009:   85.    95.   100.   104.   109.    91.   102.   107.   119.
 1018:  153.   139.   191.   236.   268.   299.   239.   186.   141.
 1027:  116.   115.    97.    77.    94.    94.    96.    76.    89.

 1117:  242.   288.   356.   339.   283.   294.   369.   794.  1975.
 1126: 5156. 10703. 16164. 18078. 14045.  7044.  2080.   367.    78.
 1135:   58.    33.    26.    36.    32.    29.    34.    36.    24.

 1301:   14.    19.    15.    13.    15.    16.    15.    16.    19.
 1310:   16.    14.    21.    30.    32.    23.    33.    18.    24.
 1319:   16.    14.    19.    15.    15.    12.     8.    12.     5.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.09	1012.	1577.	2.44	1022.58	1014	17	1.686E 00	6.4
2	2	564.20	76010.	422.	1.98	1128.72	1109	30	1.267E 02	0.4
3	2	572.53	1499.	28.	2.44	1145.37	1109	30	2.499E 00	2.6
4	1	602.87	2420.	504.	1.97	1206.02	1197	24	4.033E 00	2.4
5	1	646.00	141.	190.	2.09	1292.20	1287	11	2.352E-01	16.2

```
*******************************************************************
****************** 10 JAN 1980  9:53:58 AM  *****************
*******************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q332B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   12522.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*******************************************************************
                                  *
ACQUISITION DATE:  7JAN80 1738:02 * FWHM(1332)       2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:     5.000
ELAPSED REAL TIME:      615. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:  10.
                                  *
*******************************************************************
                                  *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                  *
*******************************************************************


UNKNOWN SAMPLE REPORT

                    PEAK                                 1 SIGMA
ELEMENT            ENERGY    BKGND      AREA    CONCENTR.  ERROR      %ERROR
------------------------------------------------------------------------
%-COPPER           511.0     2870.      3573.   0.0158    0.0005       3.2
%-ANTIMONY         564.2      695.    111912.   0.6915    0.0029       0.4
%-ARSENIC          657.3      443.       183.   0.0059    0.0011      18.1

  1009:   148.   150.   129.   148.   148.   153.   132.   176.   177.
  1018:   269.   365.   537.   580.   707.   667.   625.   462.   353.
  1027:   217.   188.   153.   140.   112.   129.   149.   142.   118.

  1117:   404.   530.   618.   526.   450.   429.   547.  1147.  3140.
  1126:  8034. 16446. 24776. 27130. 19897.  9311.  2403.   465.   111.
  1135:    78.    64.    51.    54.    56.    51.    58.    64.    58.

  1301:    43.    33.    25.    25.    31.    29.    23.    28.    40.
  1310:    28.    30.    38.    57.    66.    79.    61.    35.    29.
  1319:    32.    27.    31.    29.    25.    23.    30.    27.    22.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA    BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

  1  1  511.00    3573.   2870.   3.04  1022.41 1013  20 5.955E 00   2.7
  2  2  559.90    2014.   1065.   2.18  1120.14 1110  30 3.356E 00   3.2
  3  2  564.15  111912.    695.   1.94  1128.64 1110  30 1.865E 02   0.3
  4  1  602.78    2967.    665.   1.94  1205.84 1196  20 4.946E 00   2.2
  5  1  645.99     208.    556.   2.13  1292.18 1285  16 3.463E-01  17.5
  6  1  657.28     183.    443.   1.87  1314.74 1306  15 3.046E-01  17.9
```

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q332C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   9862.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                                  *
ACQUISITION DATE:  7JAN80 1748:28 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:      613. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                  *
***********************************************************************
                                  *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:          0.5003803      * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                  *
***********************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	3241.	2911.	0.0165	0.0006	3.7
%-ANTIMONY	564.2	475.	92766.	0.7291	0.0032	0.4
%-ARSENIC	657.4	300.	86.	0.0035	0.0011	30.7

```
 1009:  110.   119.   117.   112.   139.   143.  1.42.   166.   149.
 1018:  212.   282.   394.   534.   623.   514.   520.   392.   283.
 1027:  182.   148.   127.   115.   107.    94.  1.09.    98.   104.

 1117:  342.   481.   469.   477.   346.   350.   445.   875.  2489.
 1126: 6608. 13612. 20186. 22338. 16853. 7596.  2152.   351.    84.
 1135:   52.    36.    38.    45.    37.    51.    46.    38.    32.

 1301:   35.    23.    21.    22.    28.    29.    22.    18.    32.
 1310:   26.    23.    23.    34.    46.    43.    43.    24.    29.
 1319:   20.    28.    23.    26.    26.    24.    19.    17.    21.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.01	2911.	3241.	2.86	1022.42	1011	28	4.852E 00	3.3
2	2	560.91	1840.	750.	2.41	1122.16	1107	32	3.066E 00	3.1
3	2	564.16	92766.	475.	1.95	1128.66	1107	32	1.546E 02	0.3
4	1	602.81	2451.	424.	1.99	1205.89	1198	16	4.085E 00	2.3
5	1	645.90	164.	546.	2.07	1292.01	1282	21	2.731E-01	21.6
6	1	657.42	86.	300.	2.30	1315.02	1310	11	1.428E-01	30.6

```
***********************************************************************
****************** 10    1980   9:56:18 AM   ****** ***************
***********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  0333A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   12598.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************************
                                          *
ACQUISITION DATE:  8JAN80 1128:05 * FWHM(1332)          2.390
PRESET TIME(LIVE):         600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:         612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:         600. SEC * NBR ITERATIONS:    10.
                                          *
*************************************************************************
                                          *
DETECTOR: GEL1-8                    * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:           -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                          *
*************************************************************************


UNKNOWN SAMPLE REPORT


                     PEAK                               1 SIGMA
ELEMENT            ENERGY    BKGND      AREA     CONCENTR.   ERROR      %ERROR
-------------------------------------------------------------------------------

%-COPPER           510.7     1523.      559.     0.0064     0.0007     10.9
%-ANTIMONY         564.2      520.    88608.     0.6576     0.0029      0.4
%-ARSENIC          657.5      205.      116.     0.0060     0.0012     20.0

  1009:   120.    120.    125.    125.    132.    109.    104.    111.    106.
  1018:   123.    133.    179.    188.    194.    170.    163.    140.    126.
  1027:   118.    110.    125.     90.    101.     91.    128.    102.     97.

  1117:   233.    306.    354.    388.    311.    307.    445.    830.   2330.
  1126:  5981.  12347.  18922.  21275.  16719.   8010.   2327.    424.     87.
  1135:    49.     47.     33.     46.     37.     46.     31.     32.     46.

  1301:    14.     15.     17.     15.     14.     17.     14.     15.     17.
  1310:    17.     21.     23.     27.     26.     38.     39.     23.     19.
  1319:    13.     19.     15.     21.     16.     13.     13.     13.     14.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  510.71      559.     1523.    2.98   1021.83 1016   15 9.318E-01  10.7
 2 10  561.52     1475.      366.    1.07   1123.37 1111   28 2.458E 00   3.2
 3 10  564.20    88608.      520.    1.96   1128.74 1111   28 1.477E 02   0.3
 4  1  602.85     2853.      648.    1.89   1205.97 1199   27 4.756E 00   2.3
 5  1  646.20      167.      341.    2.17   1292.60 1284   15 2.790E-01  17.4
 6  1  657.49      116.      205.    2.58   1315.17 1308   13 1.927E-01  19.8
```

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  0333B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11767.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
**********************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1138:31 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                   *
**********************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                   *
**********************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	1543.	501.	0.0062	0.0008	12.1
%-ANTIMONY	564.2	575.	91720.	0.7301	0.0032	0.4
%-ARSENIC	657.4	318.	0. <	0.0047	NOT DETECTABLE	

```
1009:  108.  106.  104.  122.  105.  104.  109.  114.  108.
1018:  108.  134.  157.  199.  183.  196.  174.  167.  130.
1027:  124.  112.  109.  109.  107.  120.   93.  110.  108.

1117:  266.  328.  363.  382.  342.  330.  418.  857. 2324.
1126: 6208. 12844. 19505. 22369. 17067. 8290. 2453. 426.  79.
1135:   55.   51.   50.   44.   40.   39.   43.   49.   56.

1301:   17.   19.   18.   25.   19.   24.   17.   10.   16.
1310:   21.   25.   27.   33.   31.   29.   34.   27.   18.
1319:   16.   23.   18.   21.   19.   12.   17.   22.   26.
        PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.03	501.	1543.	2.60	1022.47	1016	14	8.347E-01	12.0
2	2	560.35	1286.	798.	2.16	1121.04	1108	36	2.143E 00	4.2
3	2	564.20	91720.	575.	1.95	1128.73	1108	36	1.529E 02	0.3
4	1	602.87	3081.	509.	2.08	1206.01	1195	21	5.135E 00	2.1
5	1	645.74	221.	246.	2.25	1291.68	1286	12	3.682E-01	12.1

```
************************************************************************
******************   10 ● 1980   9:58:29 AM   *****●**********
************************************************************************
```

91119065 RF LEAD

SAMPLE DATE: 7JAN80 1153:00
SAMPLE IDENTIFICATION: Q333C
TYPE OF SAMPLE: UNKNOWN
SAMPLE QUANTITY: 11840.00   UNITS: UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME: EFF.TAB1
```
***************************************************************
                                     *
```
ACQUISITION DATE: 8JAN80 1148:57 * FWHM(1332)   2.390
PRESET TIME(LIVE):   600. SEC * SENSITIVITY: 5.000
ELAPSED REAL TIME: 613. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME: 600. SEC * NBR ITERATIONS: 10.
                                     *
```
***************************************************************
                                     *
```
DETECTOR: GELI 1-8   * LIBRARY:NUCL.LIB1
DATE CALIBRATED: 26OCT79 1434:06 * ENERGY TOLERANCE: 2.000KV
KEV/CHNL: 0.5003803   * HALF LIFE RATIO: 8.00
OFFSET: -0.5932283 KEV   * ABUNDANCE LIMIT: 85.00%
                                     *
```
***************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.3	2252.	766.	0.0096	0.0009	9.6
%-ANTIMONY	564.2	569.	97956.	0.7764	0.0034	0.4
%-ARSENIC	657.4	336.	0. <	0.0049	NOT DETECTABLE	

1009:	107.	115.	113.	119.	100.	113.	107.	127.	142.
1018:	119.	135.	176.	183.	224.	210.	187.	172.	181.
1027:	131.	125.	131.	122.	103.	86.	111.	114.	104.
1117:	298.	339.	392.	415.	368.	345.	493.	943.	2489.
1126:	6828.	13535.	21076.	23393.	18304.	8867.	2660.	516.	105.
1135:	60.	57.	59.	48.	45.	44.	46.	49.	42.
1301:	22.	16.	23.	25.	18.	23.	22.	20.	17.
1310:	23.	25.	33.	30.	42.	32.	34.	28.	23.
1319:	23.	15.	11.	18.	27.	23.	18.	17.	22.

PULSE-PILE-UP CORRECTED DATA. CORRECTION = 1.000

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.26	766.	2252.	3.41	1022.94	1012	21	1.277E 00	9.5
2	2	560.72	1466.	803.	2.21	1121.77	1109	29	2.443E 00	3.8
3	2	564.20	97956.	569.	1.97	1128.73	1109	29	1.633E 02	0.3
4	1	602.85	3107.	508.	2.01	1205.98	1197	19	5.179E 00	2.1
5	1	646.24	228.	328.	2.29	1292.68	1286	16	3.808E-01	13.0

```
9111.9065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   0334A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    9873.000        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
***********************************************************************
                                         *
ACQUISITION DATE:   8JAN80 1159:23 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:       610. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC  * NBR ITERATIONS:    10.
                                         *
***********************************************************************
                                         *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803          * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV      * ABUNDANCE LIMIT:   85.00%
                                         *
***********************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	510.8	1197.	444.	0.0067	0.0008	12.1
%-ANTIMONY	564.2	425.	73353.	0.6985	0.0033	0.5
%-ARSENIC	657.8	271.	83.	0.0055	0.0017	30.2

```
 1009:    92.    99.    98.    90.    86.   105.    99.    89.    86.
 1018:    96.   114.   133.   166.   162.   152.   131.   117.   107.
 1027:   101.    80.    78.    76.    67.    84.    83.   100.    75.

 1117:   189.   271.   311.   301.   251.   260.   337.   697.  1929.
 1126:  5018. 10210. 15494. 17604. 13640.  6748.  2020.   383.    70.
 1135:    44.    37.    38.    31.    37.    30.    22.    24.    20.

 1301:    16.    10.    11.    16.    16.    10.    14.    13.    18.
 1310:    21.    18.    14.    15.    30.    32.    30.    21.    17.
 1319:    17.    14.    19.    21.    15.     9.     6.    12.    13.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	510.85	444.	1197.	2.74	1022.10	1016	14	7.406E-01	12.0
2	2	560.27	1063.	598.	2.20	1120.87	1108	37	1.772E 00	4.5
3	2	564.20	73353.	425.	1.97	1128.73	1108	37	1.223E 02	0.4
4	1	602.84	2348.	347.	1.94	1205.95	1198	18	3.914E 00	2.3
5	1	646.14	163.	174.	1.99	1292.48	1287	12	2.717E-01	13.9
6	1	657.81	83.	271.	2.67	1315.81	1311	19	1.386E-01	30.0

```
***********************************************************************
*****************  10 ● 1980 10:00:46 AM    *****●***********
***********************************************************************

 91119065 RF LEAD

 SAMPLE DATE:   7JAN80 1153:00
 SAMPLE IDENTIFICATION:  Q334B
 TYPE OF SAMPLE:  UNKNOWN
 SAMPLE QUANTITY:   11470.00        UNITS:  UG
 SAMPLE GEOMETRY:  .25 IN
 EFFICIENCY FILE NAME:  EFF.TAB1
 *******************************************************************
                                  *
 ACQUISITION DATE:  7JAN80 1840:44 * FWHM(1332)         2.390
 PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
 ELAPSED REAL TIME:        614. SEC * SHAPE PARAMETER : 15.0 %
 ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                  *
 *******************************************************************
                                  *
 DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
 KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
 OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                  *
 *******************************************************************


 UNKNOWN SAMPLE REPORT


                 PEAK                                    1 SIGMA
 ELEMENT        ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
 --------------------------------------------------------------------------

 %-COPPER       511.1     2075.      1492.    0.0076     0.0004       5.3
 %-ANTIMONY     564.2      601.   107066.     0.7303     0.0031       0.4
 %-ARSENIC      657.1      443.      127.     0.0046     0.0012      25.2

 1009:  141.   170.   134.   148.   123.   125.   134.   135.   156.
 1018:  171.   197.   255.   304.   372.   355.   297.   242.   227.
 1027:  161.   132.   129.   139.    99.   114.   129.   117.   115.

 1117:  333.   475.   497.   471.   423.   379.   539.  1030.  2951.
 1126: 7586. 15507. 23327. 25822. 19295.  9114.  2551.   449.    96.
 1135:   73.    45.    39.    53.    48.    48.    55.    48.    38.

 1301:   36.    32.    26.    21.    24.    24.    26.    26.    33.
 1310:   17.    31.    32.    44.    47.    57.    44.    26.    36.
 1319:   22.    19.    19.    28.    30.    29.    29.    24.    20.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.09    1492.    2075.    2.91   1022.59 1014   18 2.486E 00   5.0
  2  2  560.14    1817.     787.    2.20   1120.62 1107   45 3.029E 00   3.2
  3  2  564.17  107066.     601.    1.95   1128.66 1107   45 1.784E 02   0.3
  4  1  602.84    2897.     500.    1.92   1205.95 1198   16 4.828E 00   2.2
  5  1  645.75     164.     777.    2.08   1291.70 1282   28 2.734E-01  25.3
  6  1  657.07     127.     443.    2.62   1314.32 1309   15 2.120E-01  25.0
```

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q334C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    13249.00        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*********************************************************************
                                      *
ACQUISITION DATE:   7JAN80 1851:10  * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:        617. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC  * NBR ITERATIONS:   10.
                                      *
*********************************************************************
                                      *
DETECTOR: GELI-8                    * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                      *
*********************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	2520.	1501.	0.0067	0.0004	5.6
%-ANTIMONY	564.2	832.	127387.	0.7536	0.0031	0.4
%-ARSENIC	657.0	473.	171.	0.0054	0.0011	19.7

```
1009:   160.   164.   178.   137.   163.   176.   146.   162.   164.
1018:   235.   230.   304.   359.   420.   409.   354.   297.   216.
1027:   188.   175.   160.   158.   127.   144.   143.   151.   133.

1117:   443.   588.   630.   591.   493.   442.   637.  1257.  3443.
1126:  9014. 18437. 27685. 30667. 23318. 10704.  2984.   514.   131.
1135:    70.    60.    76.    65.    86.    45.    53.    50.    64.

1301:    38.    30.    29.    19.    28.    26.    29.    25.    26.
1310:    30.    26.    48.    37.    64.    46.    51.    42.    25.
1319:    26.    34.    27.    23.    19.    25.    28.    28.    26.
        PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.04	1501.	2520.	2.63	1022.48	1015	17	2.502E 00	5.4
2	2	560.06	2067.	1298.	2.18	1120.45	1112	26	3.445E 00	3.3
3	2	564.17	127387.	832.	1.95	1128.67	1112	26	2.123E 02	0.2
4	1	602.84	3508.	660.	1.91	1205.95	1195	20	5.847E 00	2.0
5	1	646.04	188.	548.	2.17	1292.28	1284	15	3.131E-01	19.1
6	1	657.01	171.	473.	2.39	1314.21	1309	18	2.856E-01	19.5

```
*********************************************************************
***************** 10 [JA]N 1980 10:03:05 AM *****[*]***********
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q335A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    11855.00         UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*********************************************************************
                                   *
ACQUISITION DATE:  7JAN80 1901:39 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                   *
*********************************************************************
                                   *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                   *
*********************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                              1 SIGMA
ELEMENT         ENERGY    BKGND      AREA   CONCENTR.   ERROR      %ERROR
---------------------------------------------------------------------------

%-COPPER        511.1    1975.      1071.   0.0054     0.0004       6.8
%-ANTIMONY      564.2     670.     90211.   0.5975     0.0027       0.4
%-ARSENIC       657.2     285.       294.   0.0104     0.0011      10.3

  1009:   123.    112.    99.   125.   133.   105.   105.   114.   120.
  1018:   154.    168.   189.   230.   259.   260.   248.   206.   163.
  1027:   149.    116.    90.    92.    92.   103.   108.   115.   100.

  1117:   450.    582.   636.   549.   413.   327.   487.   938.  2437.
  1126:  6298.  12921. 19771. 22004. 16516.  7629.  2169.   369.    83.
  1135:    59.     41.    50.    47.    38.    40.    38.    39.    34.

  1301:    19.     27.    15.    17.    17.    12.    28.    10.    22.
  1310:    22.     28.    30.    56.    70.    77.    53.    39.    32.
  1319:    18.     15.    19.    21.    20.    20.    16.    12.    30.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL  LEFT PW   CTS/SEC    %ERR

 1  1  511.13    1071.      1975.    3.05  1022.68  1011   20 1.786E 00    6.6
 2  3  560.64    2424.      1101.    2.64  1121.62  1109   45 4.039E 00    2.8
 3  3  564.17   90211.       670.    1.93  1128.68  1109   45 1.504E 02    0.3
 4  1  602.85    2478.       356.    1.99  1205.97  1198   16 4.131E 00    2.3
 5  1  645.99     212.       338.    2.31  1292.18  1282   18 3.533E-01   14.0
 6  1  657.20     294.       285.    2.38  1314.59  1306   20 4.895E-01   10.0
```

```
91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q335B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   14080.00        UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*******************************************************************
                                 *
ACQUISITION DATE:   8JAN80 1213:30 * FWHM(1332)      2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:     5.000
ELAPSED REAL TIME:      611. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                 *
*******************************************************************
                                 *
DETECTOR: GEL1-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                 *
*******************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1. SIGMA ERROR	%ERROR
%-COPPER	511.1	1547.	495.	0.0053	0.0006	12.2
%-ANTIMONY	564.2	472.	94328.	0.6314	0.0028	0.4
%-ARSENIC	657.3	368.	168.	0.0079	0.0014	18.1

```
 1009:  136.  116.  125.  131.  124.  128.  126.  116.  129.
 1018:  124.  135.  151.  172.  221.  175.  177.  161.  132.
 1027:  106.  128.  104.   96.  104.  104.  107.   110.  119.

 1117:  376.  467.  547.  511.  392.  407.  476.  937. 2631.
 1126: 6757. 13253. 19833. 22236. 17327. 8606. 2670.  518.  115.
 1135:   61.   50.   49.   43.   36.   43.   40.   31.   33.

 1301:   23.   30.   23.   23.   19.   18.   11.   17.   17.
 1310:   15.   19.   26.   40.   46.   56.   46.   27.   28.
 1319:   16.   19.   13.   18.   16.   24.   18.   15.   11.
           PULSE-PILE-UP CORRECTED DATA. CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.11	495.	1547.	2.49	1022.63	1016	14	8.247E-01	12.1
2	3	560.40	2121.	749.	2.48	1121.12	1109	29	3.536E 00	2.8
3	3	564.19	94328.	472.	2.00	1128.71	1109	29	1.572E 02	0.3
4	1	602.86	3077.	468.	2.02	1205.99	1197	17	5.128E 00	2.1
5	1	646.14	253.	419.	2.16	1292.48	1281	27	4.222E-01	13.0
6	1	657.31	168.	368.	2.14	1314.82	1308	21	2.795E-01	17.9

```
*******************************************************************
******************** 10 JAN 1980 10:05:22 AM  *********************
*******************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q335C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9464.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************
                                      *
ACQUISITION DATE:  7JAN80 1922:32 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                      *
***********************************************************
                                      *
DETECTOR: GEL1-8                    * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803       * HALF LIFE RATIO:    8.00
OFFSET:           -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                                      *
***********************************************************


UNKNOWN SAMPLE REPORT


                    PEAK                                  1 SIGMA
ELEMENT            ENERGY    BKGND      AREA    CONCENTR.   ERROR        %ERROR
------------------------------------------------------------------------------

%-COPPER           511.0     1544.      769.    0.0049     0.0004         8.2
%-ANTIMONY         564.2      619.    77809.    0.6480     0.0030         0.5
%-ARSENIC          657.3      257.      185.    0.0083     0.0012        14.5

 1009:   104.    101.    101.    103.    102.    124.     98.    118.    114.
 1018:   119.    160.    166.    204.    239.    206.    197.    162.    124.
 1027:   111.    126.     94.     76.     88.     91.    106.     85.     87.

 1117:   382.    510.    532.    496.    364.    321.    369.    736.   2141.
 1126:  5434.  11182.  16945.  18914.  14182.   6712.   1893.    324.     58.
 1135:    45.     36.     28.     27.     40.     43.     27.     39.     22.

 1301:    19.     10.      9.     18.     18.     14.     17.     18.     12.
 1310:    19.     15.     19.     44.     52.     63.     44.     29.     20.
 1319:    17.     11.     21.     11.     19.     14.     12.      9.     18.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT   ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

 1.  1  510.96      769.     1544.    2.82   1022.32 1015   16 1.282E 00   8.1
 2.  5  559.55     2755.     1254.    3.16   1119.44 1111   51 4.592E 00   2.6
 3.  5  564.18    77809.      619.    1.94   1128.68 1111   51 1.297E 02   0.4
 4.  1  602.81     2166.      513.    1.98   1205.89 1195   25 3.610E 00   2.6
 5.  1  646.03      203.      290.    3.04   1292.26 1283   20 3.385E-01  13.0
 6.  1  657.25      185.      257.    1.91   1314.69 1307   18 3.090E-01  14.3
```

```
91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q336A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   8158.000         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                                    *
ACQUISITION DATE:  8JAN80 1223:57 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:        607. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                    *
***********************************************************************
                                    *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                    *
***********************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	1024.	374.	0.0070	0.0009	13.3
%-ANTIMONY	564.2	245.	56220.	0.6507	0.0034	0.5
%-ARSENIC	656.8	171.	78.	0.0063	0.0017	26.5

```
 1009:   64.    82.    56.    59.    57.    67.    67.    72.    70.
 1018:   70.    85.    98.    97.   123.   122.   109.    91.    87.
 1027:   75.    67.    63.    62.    72.    62.    47.    68.    68.

 1117:  185.   205.   218.   239.   197.   210.   278.   578.  1556.
 1126: 3917.  7819. 11728. 13205. 10283.  5371.  1661.   355.    73.
 1135:   41.    18.    18.    15.    16.    17.    16.    28.    14.

 1301:    9.     7.    12.    10.     9.     9.    11.    15.    11.
 1310:   14.     8.    13.    24.    23.    22.    17.    14.     9.
 1319:   11.    10.     7.    10.    14.     6.    16.    12.     9.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.03	374.	1024.	2.98	1022.48	1013	17	6.236E-01	13.2
2	2	559.82	798.	407.	2.26	1119.98	1110	29	1.330E 00	5.0
3	2	564.20	56220.	245.	2.02	1128.73	1110	29	9.370E 01	0.4
4	1	602.87	1751.	294.	1.92	1206.01	1197	21	2.918E 00	2.8
5	1	646.12	207.	176.	3.32	1292.45	1281	19	3.444E-01	11.4
6	1	656.78	78.	171.	2.62	1313.75	1306	18	1.296E-01	26.4

```
****************************************************************************
******************** 10 JAN 1980 10:07:43 AM   ****************************
****************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q336B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   10453.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
****************************************************************************
                              *
ACQUISITION DATE:  7JAN80 1943:17 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                              *
****************************************************************************
                              *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1.
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                              *
****************************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                              1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER        510.9    1824.     1005.     0.0060      0.0004       7.0
%-ANTIMONY      564.2     511.    90332.     0.6836      0.0030       0.4
%-ARSENIC       657.3     257.      123.     0.0051      0.0010      20.6

 1009:   147.   123.    91.   131.   110.   124.   119.   119.   126.
 1018:   157.   188.   219.   258.   276.   288.   220.   196.   167.
 1027:   142.   107.   104.    98.   115.    91.    98.    98.    84.

 1117:   303.   342.   442.   436.   346.   356.   454.   923.  2326.
 1126:  6222. 13016. 19684. 22123. 16538.  7633.  2173.   387.    79.
 1135:    51.    50.    45.    39.    46.    40.    38.    41.    34.

 1301:    23.    28.    30.    28.    24.    17.    24.    23.    15.
 1310:    21.    21.    27.    30.    50.    32.    39.    28.    26.
 1319:    16.    19.    13.    23.    23.    20.    17.    19.    20.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  510.92    1005.    1824.    2.86  1022.25 1015   16 1.674E 00   6.8
 2  2  560.22    1573.     703.    2.17  1120.77 1107   39 2.622E 00   3.5
 3  2  564.18   90332.     511.    1.93  1128.68 1107   39 1.506E 02   0.3
 4  1  602.85    2685.     690.    2.01  1205.97 1199   23 4.474E 00   2.4
 5  1  646.13     275.     320.    3.28  1292.46 1282   16 4.589E-01  11.0
 6  1  657.29     123.     257.    2.20  1314.77 1308   13 2.057E-01  20.4
```

```
****************************************************************
****************** 10 JAN 1980 10:08:51 AM  *****************
****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q336C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    11304.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                    *
ACQUISITION DATE:  7JAN80 1953:44 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:      614. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC * NBR ITERATIONS:   10.
                                    *
*****************************************************************
                                    *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                    *
*****************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                              1 SIGMA
ELEMENT           ENERGY   BKGND      AREA    CONCENTR.   ERROR      %ERROR
--------------------------------------------------------------------------

%-COPPER          511.1    2104.     1303.    0.0072    0.0004       5.9
 %-ANTIMONY       564.2     696.   104235.    0.7308    0.0031       0.4
 %-ARSENIC        656.8     375.      208.    0.0079    0.0012      15.1

  1009:  124.   131.   157.   133.   138.   133.   143.   132.   160.
  1018:  151.   211.   248.   293.   332.   349.   296.   239.   196.
  1027:  159.   148.   135.   112.   112.   124.   131.   108.   118.

  1117:  351.   465.   457.   445.   382.   399.   543.  1065.  2727.
  1126: 7430. 14870. 23107. 25302. 18884.  8828.  2456.   429.    89.
  1135:   62.    62.    58.    50.    45.    41.    47.    47.    49.

  1301:   23.    32.    18.    35.    32.    23.    23.    18.    24.
  1310:   28.    28.    27.    50.    57.    50.    37.    36.    27.
  1319:   15.    18.    26.    29.    22.    21.    23.    20.    24.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.06    1303.    2104.   2.84  1022.53 1014  17 2.172E 00    5.7
  2  2  559.66    1547.    1059.   2.18  1119.65 1112  30 2.578E 00    3.9
  3  2  564.17  104235.     696.   1.93  1128.67 1112  30 1.737E 02    0.3
  4  1  602.83    2880.     587.   1.97  1205.93 1199  17 4.800E 00    2.2
  5  1  645.74     170.     518.   2.00  1291.68 1280  18 2.834E-01   20.4
  6  1  656.75     208.     375.   3.10  1313.69 1305  15 3.461E-01   14.9
```

```
****************************●*****************************************
******************** 10 JAN 1980 10:10:02 AM  ****●**********
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q337A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9607.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                      *
ACQUISITION DATE:  7JAN80 2004:09 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                      *
*********************************************************************
                                      *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:          0.5003803      * HALF LIFE RATIO:   8.00
OFFSET:           -0.5932283 KEV  * ABUNDANCE LIMIT:   85.00%
                                      *
*********************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.1	2148.	901.	0.0059	0.0005	8.2
%-ANTIMONY	564.2	427.	73539.	0.6078	0.0029	0.5
%-ARSENIC	657.1	278.	243.	0.0109	0.0013	11.9

```
 1009:   93.   74.  100.   85.   96.  102.  112.  105.  107.
 1018:  126.  128.  166.  205.  236.  237.  210.  173.  154.
 1027:   99.   97.  101.   82.   87.   79.   89.   69.   84.

 1117:  379.  513.  549.  452.  374.  313.  369.  675. 1918.
 1126: 5051. 10351. 16142. 18027. 13520. 6333. 1797.  334.   72.
 1135:   32.   39.   43.   35.   30.   20.   30.   30.   29.

 1301:   15.   13.   30.   15.   16.   21.   19.   17.   19.
 1310:   17.   22.   22.   61.   50.   63.   59.   30.   26.
 1319:   22.   18.   19.   14.   24.   17.    7.   16.   16.
         PULSE-PILE-UP CORRECTED DATA. CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.12	901.	2148.	2.93	1022.65	1012	24	1.502E 00	8.0
2	9	559.52	3204.	1069.	3.57	1119.38	1109	28	5.340E 00	2.3
3	9	564.18	73539.	427.	1.92	1128.70	1109	28	1.226E 02	0.4
4	1	602.87	2054.	392.	1.95	1206.01	1197	16	3.423E 00	2.6
5	1	646.26	209.	332.	3.95	1292.72	1284	17	3.480E-01	14.1
6	1	657.12	243.	278.	2.48	1314.42	1308	15	4.052E-01	11.6

```
*******************************************************************
****************** 10 JAN 1980 10:11:12 AM  *******●***********
*******************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q337B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   10572.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                     *
ACQUISITION DATE:  7JAN80 2014:32 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                     *
*****************************************************************
                                     *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                     *
*****************************************************************


UNKNOWN SAMPLE REPORT


                   PEAK                              1 SIGMA
ELEMENT           ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER          511.0     1645.      885.    0.0053      0.0004       7.5
 %-ANTIMONY       564.2      478.    82048.    0.6173      0.0028       0.5
 %-ARSENIC        657.2      352.      220.    0.0090      0.0013      14.0

 1009:   108.    108.     95.   109.    99.   101.    98.    96.   114.
 1018:   145.    139.    183.   236.   238.   255.   209.   186.   142.
 1027:   114.    118.     93.   106.    93.    95.    98.    93.   106.

 1117:   370.    561.    601.   518.   407.   347.   404.   843.  2078.
 1126:  5621.  11393.  17889. 19846. 15262.  7360.  2052.   377.    81.
 1135:    48.     37.     34.    35.    35.    31.    32.    51.    22.

 1301:    20.     20.     20.    20.    16.    20.    16.    21.    21.
 1310:    18.     21.     37.    47.    61.    57.    45.    38.    30.
 1319:    26.     20.     19.    16.    18.    14.    18.    12.    28.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.02     885.    1645.   2.68  1022.46 1015  17 1.476E 00   7.3
  2  6  559.58    3322.    1168.   3.37  1119.50 1109  31 5.536E 00   2.3
  3  6  564.19   82048.     478.   1.94  1128.72 1109  31 1.367E 02   0.4
  4  1  602.86    2281.     515.   1.89  1205.99 1198  21 3.802E 00   2.5
  5  1  645.84     169.     236.   2.27  1291.88 1287  11 2.813E-01  15.0
  6  1  657.17     220.     352.   2.64  1314.53 1304  19 3.669E-01  13.8
```

```
*****************************************          ****************************************
******************    10 JAN 1980 10:12:22 AM    ****************************
*************************************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q337C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    9809.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************************
                                          *
ACQUISITION DATE:  7JAN80 2024:58 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                          *
***********************************************************************************
                                          *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                          *
***********************************************************************************


UNKNOWN SAMPLE REPORT


                    PEAK                                    1 SIGMA
ELEMENT            ENERGY    BKGND      AREA      CONCENTR.    ERROR      %ERROR
---------------------------------------------------------------------------------

%-COPPER           510.9     2010.      976.      0.0064      0.0005        7.4
%-ANTIMONY         564.2      654.    79629.      0.6469      0.0030        0.5
%-ARSENIC          657.4      401.       0. <    0.0043     NOT DETECTABLE

  1009:   100.   125.    95.    95.   106.   103.   112.   102.   117.
  1018:   126.   140.   211.   236.   272.   250.   195.   191.   161.
  1027:   127.    93.    89.    90.    86.   103.    98.    92.   100.

  1117:   358.   523.   652.   556.   387.   308.   396.   758.  2040.
  1126:  5535. 11507. 17277. 19293. 14662.  6941.  1941.   369.    87.
  1135:    41.    37.    45.    36.    34.    23.    32.    31.    30.

  1301:    18.    21.    14.    21.    21.    13.    10.    20.    14.
  1310:    19.    22.    32.    38.    61.    57.    57.    27.    20.
  1319:    15.    17.    22.    20.    12.    17.    11.    24.    18.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC:   %ERR

  1  1  510.93    976.     2010.    2.89   1022.27 1013   20 1.626E 00    7.2
  2  4  559.60   2907.     1099.    2.86   1119.53 1112   54 4.845E 00    2.5
  3  4  564.18  79629.      654.    1.95   1128.69 1112   54 1.327E 02    0.4
  4  1  602.88   2322.      351.    2.10   1206.03 1196   18 3.870E 00    2.4
  5  1  652.73    204.     1082.   12.15   1305.66 1280   42 3.405E-01   23.8
```

```
91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q338A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11368.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************
                              *
ACQUISITION DATE:  7JAN80 2035:20 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                              *
***********************************************************
                              *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                              *
***********************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	2005.	1997.	0.0114	0.0005	4.2
%-ANTIMONY	564.2	504.	89900.	0.6314	0.0028	0.4
%-ARSENIC	657.2	450.	448.	0.0173	0.0015	8.6

```
 1009:  122.   126.   109.   110.   118.   126.   125.   141.   149.
 1018:  190.   206.   302.   386.   417.   403.   369.   308.   195.
 1027:  148.   133.   110.    98.   105.   118.   129.   118.    94.

 1117:  584.   804.   967.   764.   570.   361.   456.   903.  2293.
 1126: 6237. 12879. 19548. 22079. 16352.  7755.  2191.   394.    95.
 1135:   48.    44.    44.    32.    42.    51.    32.    29.    47.

 1301:   24.    15.    17.    18.    12.    28.    21.    23.    25.
 1310:   16.    48.    52.    82.    94.    94.    83.    61.    23.
 1319:   29.    18.    21.    14.    10.    17.    16.    16.    20.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.01	1997.	2005.	2.97	1022.43	1012	19	3.328E 00	3.9
2	5	559.45	4694.	952.	2.84	1119.23	1107	34	7.823E 00	1.7
3	5	564.18	89900.	504.	1.93	1128.69	1107	34	1.498E 02	0.3
4	1	602.83	2538.	518.	1.97	1205.93	1195	19	4.230E 00	2.4
5	1	645.88	162.	301.	2.26	1291.95	1286	14	2.699E-01	17.1
6	1	657.16	448.	450.	2.71	1314.51	1304	25	7.461E-01	8.2

```
************************************************************
******************* 10 JAN 1980 10:14:43 AM   *****●*******
************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q338B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11406.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*******************************************************
                                   *
ACQUISITION DATE:  7JAN80 2045:47 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                   *
*******************************************************
                                   *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                   *
*******************************************************


UNKNOWN SAMPLE REPORT


                   PEAK                                  1 SIGMA
ELEMENT            ENERGY    BKGND      AREA    CONCENTR.  ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER           511.1     2066.      1919.   0.0110    0.0005      4.4
  %-ANTIMONY       564.2      567.     93141.   0.6532    0.0029      0.4
  %-ARSENIC        657.3      287.       377.   0.0145    0.0012      8.6

  1009:   127.   122.   129.   124.   130.   132.   121.   127.   144.
  1018:   177.   226.   305.   388.   432.   399.   401.   319.   224.
  1027:   195.   137.   114.   111.   118.   115.   100.   121.   142.

  1117:   631.   867.   994.   789.   617.   403.   454.   869.  2331.
  1126:  6274. 13330. 20004. 22597. 17183.  8326.  2396.   460.    94.
  1135:    59.    62.    58.    44.    32.    38.    44.    43.    49.

  1301:    23.    24.    27.    30.    23.    16.    24.    29.    20.
  1310:    18.    30.    46.    68.   104.   111.    77.    61.    39.
  1319:    17.    24.    13.    17.    16.    22.    17.    14.    19.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.08     1919.     2066.   2.89  1022.56 1015   17 3.198E 00   4.1
  2  4  559.42     4796.     1040.   2.77  1119.18 1107   36 7.994E 00   1.7
  3  4  564.19    93141.      567.   1.95  1128.71 1107   36 1.552E 02   0.3
  4  1  602.88     2665.      495.   2.04  1206.04 1195   20 4.441E 00   2.3
  5  1  645.92      147.      394.   2.11  1292.04 1283   15 2.453E-01  20.8
  6  1  657.30      377.      287.   2.03  1314.79 1309   14 6.277E-01   8.2
```

```
*********************************************************************
******************** 10 JAN 1980 10:15:52 AM  **********************
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q338C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    14742.00        UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                   *
ACQUISITION DATE:  7JAN80 2056:13 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       617. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                   *
*********************************************************************
                                   *
DETECTOR: GCL1-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:  8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                   *
*********************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                1 SIGMA
ELEMENT          ENERGY    BKGND     AREA    CONCENTR.   ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER         511.0     3121.     2782.    0.0125     0.0005       3.8
 %-ANTIMONY      564.2      852.   127400.    0.6925     0.0028       0.4
 %-ARSENIC       657.3      485.     496.     0.0149     0.0012       8.1

 1009:   176.   180.   166.   183.   174.   172.   186.   185.   235.
 1018:   254.   334.   431.   549.   606.   603.   540.   430.   324.
 1027:   217.   201.   169.   150.   155.   145.   155.   144.   161.

 1117:   861.  1200.  1309.  1107.   750.   535.   646.  1235.  3367.
 1126:  8897. 18188. 27649. 30797. 23347. 11116.  3275.   576.   147.
 1135:    80.    85.    73.    73.    62.    69.    59.    54.    77.

 1301:    36.    34.    24.    43.    22.    35.    34.    35.    26.
 1310:    37.    40.    68.    97.   132.   153.   123.    62.    34.
 1319:    22.    35.    31.    37.    31.    32.    27.    26.    33.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

 1  1  511.05    2782.    3121.   2.90  1022.50 1013  19 4.637E 00   3.4
 2  5  559.42    6440.    1586.   2.82  1119.17 1110  33 1.073E 01   1.5
 3  5  564.18  127400.     852.   1.95  1128.69 1110  33 2.123E 02   0.3
 4  1  602.82    3619.     670.   1.98  1205.91 1195  19 6.032E 00   1.9
 5  1  646.04     239.     384.   2.01  1292.28 1287  13 3.991E-01  13.2
 6  1  657.26     496.     485.   1.92  1314.70 1309  17 8.272E-01   7.7
```

```
*****************************************************************************
******************* 10 JAN 1980 10:17:02 AM  ***************************
*****************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q339A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9328.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************************
                                      *
ACQUISITION DATE:  7JAN80 2106:43 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:        611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                      *
*****************************************************************************
                                      *
DETECTOR: GEL1-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                      *
*****************************************************************************


UNKNOWN SAMPLE REPORT

                    PEAK                                1 SIGMA
ELEMENT            ENERGY    BKGND      AREA     CONCENTR.   ERROR       %ERROR
----------------------------------------------------------------------------

%-COPPER           511.0     2488.     2955.     0.0211     0.0007        3.4
%-ANTIMONY         564.2     2536.    81681.     0.7030     0.0033        0.5
%-ARSENIC          657.4      223.       0. <    0.0034      NOT DETECTABLE

   1009:     93.    95.    115.    110.     99.    118.    115.    130.    142.
   1018:    176.   278.    384.    518.    557.    548.    510.    380.    273.
   1027:    169.   136.    102.    118.     80.     89.     87.     86.     91.

   1117:    204.   207.    218.    235.    268.    292.    408.    746.   2096.
   1126:   5765. 11679.  17706.  19653.  15081.   7217.   2028.    330.     73.
   1135:     48.    39.     35.     34.     38.     38.     35.     40.     31.

   1301:     13.    28.     24.     17.     12.     15.     21.     14.     16.
   1310:     14.    14.     20.     23.     18.     11.     19.     24.     18.
   1319:     13.    18.     15.     16.     15.     19.     11.     18.     23.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1. 511.03    2955.     2488.    2.94   1022.48 1013  25 4.925E 00   3.0
  2  1. 564.18   81681.     2536.    1.96   1128.70 1118  21 1.361E 02   0.4
  3  1. 602.83    2232.      650.    1.96   1205.92 1194  26 3.721E 00   2.7
  4  1. 645.87     147.      425.    1.95   1291.95 1283  20 2.442E-01  21.5
```

```
*************************************************************
****************    10 JAN 1980 10:18:10 AM   **************
*************************************************************

 9111.9065 RF LEAD

 SAMPLE DATE:   7JAN80 1153:00
 SAMPLE IDENTIFICATION:   Q339B
 TYPE OF SAMPLE:  UNKNOWN
 SAMPLE QUANTITY:   13724.00         UNITS:  UG
 SAMPLE GEOMETRY:  .25 IN
 EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************
                              *
 ACQUISITION DATE:  7JAN80 2117:06 * FWHM(1.332)        2.390
 PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
 ELAPSED REAL TIME:       616. SEC * SHAPE PARAMETER : 15.0 %
 ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                              *
*************************************************************
                              *
 DETECTOR: GFL1-8                 * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
 KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
 OFFSET:       -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                              *
*************************************************************


 UNKNOWN SAMPLE REPORT


                    PEAK                                 1 SIGMA
 ELEMENT          ENERGY    BKGND       AREA     CONCENTR.    ERROR        %ERROR
 ----------------------------------------------------------------------------------

 %-COPPER         511.1     3366.      4267.      0.0210      0.0006        2.9
 %-ANTIMONY       564.2     3924.    121513.      0.7121      0.0030        0.4
 %-ARSENIC        657.4      370.        0. <     0.0030      NOT DETECTABLE

  1009:   154.   164.   152.   155.   173.   177.   191.   183.   223.
  1018:   282.   419.   549.   714.   810.   774.   780.   571.   388.
  1027:   278.   186.   174.   156.   146.   147.   149.   109.   163.

  1117:   295.   333.   357.   381.   377.   408.   601.  1174.  3247..
  1126:  8548. 17465. 26219. 29738. 22421. 10725.  3128.   566.   138.
  1135:    73.    85.    71.    63.    56.    63.    58.    63.    62.

  1301:    26.    29.    17.    22.    18.    31.    23.    26.    25.
  1310:    25.    32.    33.    27.    33.    36.    24.    24.    27.
  1319:    25.    32.    27.    22.    34.    21.    18.    21.    27.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW    CTS/SEC     %ERR

  1  1  511.08    4267.      3366.    2.98   1022.57 1011   22 7.111E 00    2.5
  2  1  564.19  121513.      3924.    1.95   1128.70 1120   18 2.025E 02    0.3
  3  1  602.85    3418.       952.    2.02   1205.97 1198   22 5.696E 00    2.1
  4  1  646.21     228.       321.    2.33   1292.62 1288   12 3.800E-01   12.9
```

```
*********************************** ● *****************************************
******************* 10 JAN 1980 10:19:15 AM  *****●***********
***********************************************************************

9111.9065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  0339C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:  10783.00       UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                              *
ACQUISITION DATE:  7JAN80 2127:36 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       613. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                              *
***********************************************************************
                              *
DETECTOR: GEL1-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                              *
***********************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                              1 SIGMA
ELEMENT          ENERGY    BKGND     AREA    CONCENTR.   ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER         511.1     2361.    3647.     0.0230     0.0007      3.0
%-ANTIMONY       564.2     2934.  100369.     0.7500     0.0033      0.4
%-ARSENIC        657.4      279.      0. <    0.0033    NOT DETECTABLE

 1009:   148.   106.   149.   152.   114.   147.   149.    161.    175.
 1018:   239.   344.   508.   553.   696.   747.   652.    431.    339.
 1027:   214.   175.   128.   114.   122.   109.   122.    127.    125.

 1117:   234.   263.   268.   283.   342.   373.   483.   1005.   2672.
 1126:  6934. 14420. 21681. 24415. 18480.  8948.  2491.    465.     88.
 1135:    63.    58.    63.    43.    55.    45.    51.     46.     38.

 1301:    25.    26.    20.    27.    25.    21.    20.     26.     20.
 1310:    23.    18.    27.    16.    27.    19.    24.     22.     26.
 1319:    24.    17.    16.    19.    21.    22.    22.     15.     27.
          PULSE-PILE-UP CORRECTED DATA. CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.06    3647.     2361.   2.85  1022.54 1013  19 6.078E 00   2.5
  2  1  564.19  100369.     2934.   1.95  1128.70 1119  18 1.673E 02   0.3
  3  1  602.85    2811.      466.   1.96  1205.96 1195  19 4.685E 00   2.2
  4  1  645.90     248.      261.   2.37  1292.00 1287  12 4.132E-01  11.2
```

```
********************************************************************
***************** 10 JAN 1980 10:20:27 AM  *****************
********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q340A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9980.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
********************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2138:01 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                    *
********************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                    *
********************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                  1 SIGMA
ELEMENT         ENERGY    BKGND     AREA    CONCENTR.   ERROR      %ERROR
-------------------------------------------------------------------------

%-COPPER        511.1    1415.     823.    0.0057     0.0004       7.5
 %-ANTIMONY     564.2     456.   74248.    0.6006     0.0028       0.5
 %-ARSENIC      657.4     238.     185.    0.0084     0.0012      14.1

  1009:   93.    86.    98.    95.    76.   100.   100.    83.   112.
  1018:  106.   143.   164.   175.   180.   208.   179.   169.   101.
  1027:   89.    79.    84.    78.    75.    80.    83.    77.    82.

  1117:  313.   452.   477.   477.   338.   322.   355.   656.  1856.
  1126: 51.26. 10707. 15981. 17903. 13789.  6480.  1876.   313.    49.
  1135:   49.    32.    32.    30.    29.    23.    35.    28.    18.

  1301:   25.    10.    15.    13.     4.    11.    16.    10.    10.
  1310:   11.    23.    23.    24.    30.    55.    49.    23.    21.
  1319:   11.    22.    19.    16.    13.    14.    20.    10.    14.
          PULSE-PILE-UP CORRECTED DATA. CORRECTION =   1.000

 PK IT  ENERGY    AREA    BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

  1  1  511.10    823.   1415.   3.40  1022.60 1013  17 1.371E 00   7.3
  2  6  559.92   2716.   1041.   3.54  1120.17 1109  36 4.527E 00   2.6
  3  6  564.19  74248.    456.   1.95  1128.70 1109  36 1.237E 02   0.4
  4  1  602.88   2091.    449.   2.05  1206.03 1194  23 3.485E 00   2.6
  5  1  645.93    123.    231.   2.04  1292.06 1287  12 2.049E-01  19.7
  6  1  657.39    185.    238.   2.31  1314.96 1308  19 3.084E-01  13.9
```

91119065 RF LEAD

SAMPLE DATE: 7JAN80 1153:00
SAMPLE IDENTIFICATION: Q340B
TYPE OF SAMPLE: UNKNOWN
SAMPLE QUANTITY: 13486.00   UNITS: UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME: EFF.TAB1
```
****************************************************************
                                       *
```
ACQUISITION DATE: 7JAN80 2148:23 * FWHM(1332)   2.390
PRESET TIME(LIVE):   600. SEC * SENSITIVITY: 5.000
ELAPSED REAL TIME: 614. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME: 600. SEC * NBR ITERATIONS: 10.
```
                                       *
****************************************************************
                                       *
```
DETECTOR: GELI-8   * LIBRARY:NUCL.LIB1
DATE CALIBRATED: 26OCT79 1434:06 * ENERGY TOLERANCE: 2.000KV
KEV/CHNL: 0.5003803   * HALF LIFE RATIO: 8.00
OFFSET: -0.5932283 KEV   * ABUNDANCE LIMIT: 85.00%
```
                                       *
****************************************************************


UNKNOWN SAMPLE REPORT

| ELEMENT | PEAK ENERGY | BKGND | AREA | CONCENTR. | 1 SIGMA ERROR | %ERROR |
|---|---|---|---|---|---|---|
| %-COPPER | 510.9 | 2299. | 1158. | 0.0060 | 0.0004 | 6.8 |
| %-ANTIMONY | 564.2 | 658. | 103271. | 0.6193 | 0.0027 | 0.4 |
| %-ARSENIC | 657.2 | 344. | 225. | 0.0076 | 0.0010 | 13.7 |

```
1009: 133. 138. 133. 108. 142. 151. 133. 160. 137.
1018: 158. 200. 242. 317. 290. 270. 280. 213. 178.
1027: 155. 131. 127. 120. 123. 125. 109. 124. 118.

1117: 445.   674.   698.   609.   492.   378.   542.   982. 2779.
1126: 7092. 14599. 22288. 25007. 19206. 9055. 2648. 474.   97.
1135:   56.   59.   49.   49.   52.   60.   47.   50.   46.

1301:   32.   26.   25.   15.   22.   19.   22.   32.   14.
1310:   32.   29.   33.   60.   67.   69.   58.   36.   30.
1319:   17.   24.   9.   28.   24.   22.   15.   20.   14.
```
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

| PK | IT | ENERGY | AREA | BKGND | FWHM | CHANNEL | LEFT | PW | CTS/SEC | %ERR |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 510.86 | 1158. | 2299. | 2.91 | 1022.13 | 1012 | 19 | 1.929E 00 | 6.6 |
| 2 | 6 | 560.01 | 3683. | 1565. | 3.54 | 1120.36 | 1110 | 30 | 6.138E 00 | 2.2 |
| 3 | 6 | 564.19 | 103271. | 658. | 1.95 | 1128.71 | 1110 | 30 | 1.721E 02 | 0.3 |
| 4 | 1 | 602.92 | 2800. | 488. | 2.03 | 1206.12 | 1198 | 16 | 4.666E 00 | 2.2 |
| 5 | 1 | 646.02 | 186. | 392. | 1.99 | 1292.24 | 1284 | 14 | 3.099E-01 | 16.8 |
| 6 | 1 | 657.18 | 225. | 344. | 2.13 | 1314.55 | 1309 | 17 | 3.754E-01 | 13.4 |

```
*****************************************************************
******************* 10 JAN 1980 10:22:47 AM  ******************
*****************************************************************

 91119065 RF LEAD

 SAMPLE DATE:   7JAN80 1153:00
 SAMPLE IDENTIFICATION:  0340C
 TYPE OF SAMPLE:  UNKNOWN
 SAMPLE QUANTITY:   10947.00         UNITS:  UG
 SAMPLE GEOMETRY:  .25 IN
 EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                     *
 ACQUISITION DATE:  7JAN80 2158:50 * FWHM(1332)        2.390
 PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
 ELAPSED REAL TIME:       612. SEC * SHAPE PARAMETER : 15.0 %
 ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                     *
*****************************************************************
                                     *
 DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
 KEV/CHNL:       0.5003803         * HALF LIFE RATIO:  8.00
 OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                     *
*****************************************************************


 UNKNOWN SAMPLE REPORT


                 PEAK                                1 SIGMA
 ELEMENT        ENERGY    BKGND      AREA    CONCENTR.    ERROR       %ERROR
 ---------------------------------------------------------------------------

 %-COPPER       511.2     1717.      817.    0.0052     0.0004        8.1
 %-ANTIMONY     564.2      442.    89829.    0.6649     0.0030        0.4
 %-ARSENIC      657.0      210.      209.    0.0087     0.0011       12.3

  1009:  113.   126.   100.   118.   115.   116.   116.   111.    89.
  1018:  136.   138.   176.   192.   254.   233.   221.   193.   151.
  1027:  132.   124.    99.   113.   110.    87.    90.    95.   114.

  1117:  390.   545.   667.   593.   417.   358.   412.   862.  2323.
  1126: 6221. 12795. 19485. 21424. 16496.  8023.  2240.   402.    87.
  1135:   48.    44.    36.    42.    41.    51.    33.    42.    36.

  1301:   17.    26.    20.    14.    25.    20.    16.    21.    19.
  1310:   17.    25.    38.    55.    64.    62.    48.    17.    22.
  1319:   16.    17.    19.    14.    19.    17.    15.    19.    16.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.22     817.    1717.   2.73  1022.85 1016   17 1.362E 00   8.0
  2  6  559.59    3491.     948.   3.14  1119.52 1107   31 5.818E 00   2.1
  3  6  564.18   89829.     442.   1.96  1128.70 1107   31 1.497E 02   0.3
  4  1  602.87    2565.     370.   1.97  1206.00 1194   20 4.274E 00   2.2
  5  1  645.97     181.     260.   1.99  1292.15 1286   13 3.023E-01  14.6
  6  1  657.05     209.     210.   2.03  1314.28 1308   12 3.476E-01  12.0
```

```
*******************************************************************
****************** 10 JAN 1980 10:23:58 AM  *****************
*******************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q358A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11667.00        UNITS:  UG
SAMPLE GEOMETRY: .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************************
                                      *
ACQUISITION DATE:  8JAN80 1234:19 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600.  SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:      608.  SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600.  SEC * NBR ITERATIONS:   10.
                                      *
************************************************************************
                                      *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL :        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                      *
************************************************************************


UNKNOWN SAMPLE REPORT

                   PEAK                                  1 SIGMA
ELEMENT           ENERGY    BKGND     AREA    CONCENTR.   ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER          511.1     1259.     1393.    0.0184     0.0009       4.8
%-ANTIMONY        564.2      262.    59979.    0.4863     0.0025       0.5
%-ARSENIC         657.4      183.       0. <   0.0038     NOT DETECTABLE

  1009:     81.    78.    92.    76.    86.    74.    72.    73.    76.
  1018:    100.   156.   194.   224.   304.   294.   278.   195.   158.
  1027:     90.    88.    75.    69.    70.    65.    57.    62.    71.

  1117:    211.   210.   238.   243.   207.   208.   303.   508.  1541.
  1126:  4129.  8241. 12507. 14409. 11273.  5466.  1683.   275.    56.
  1135:     37.    22.    21.    18.    23.    23.    18.    27.    20.

  1301:     13.    15.    10.    13.     5.     9.    10.    14.     7.
  1310:     11.    16.    13.    13.    22.    19.    17.    20.    11.
  1319:     10.    11.    13.    10.    11.     8.     9.     8.     7.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.12    1393.    1259.    2.82  1022.65 1015  19 2.322E 00    4.5
  2  2  561.79     953.     405.    2.42  1123.91 1107  31 1.588E 00    4.4
  3  2  564.21   59979.     262.    1.98  1128.75 1107  31 9.997E 01    0.4
  4  1  602.83    2021.     234.    2.10  1205.92 1197  17 3.368E 00    2.5
  5  1  646.29     171.     156.    2.94  1292.78 1285  16 2.853E-01   12.8
```

```
*****************************************************************
****************** 10 JAN 1980 10:25:06 AM  *******************
*****************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  0358B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11868.00          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                 *
ACQUISITION DATE:  8JAN80 1244:41 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL  TIME:       608. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                 *
*****************************************************************
                                 *
DETECTOR: GELI-8                 * LIBRARY:NUCL.L1B1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803      * HALF LIFE RATIO:   8.00
OFFSET:           -0.5932283 KEV  * ABUNDANCE LIMIT:  85.00%
                                 *
*****************************************************************


UNKNOWN SAMPLE REPORT

                   PEAK                                1 SIGMA
ELEMENT          ENERGY     BKGND      AREA     CONCENTR.    ERROR      %ERROR
------------------------------------------------------------------------------

%-COPPER          511.1     1509.     1339.     0.0176     0.0009        5.2
%-ANTIMONY        564.2      367.    62272.     0.4973     0.0025        0.5
%-ARSENIC         657.4      210.       0. <    0.0040     NOT DETECTABLE

 1009:   76.    78.    78.    85.    94.    94.    71.    81.    98.
 1018:  153.   166.   203.   274.   318.   337.   259.   223.   167.
 1027:  108.    85.    71.    82.    85.    66.    85.    83.    72.

 1117:  168.   221.   228.   243.   219.   245.   329.   551.  1.626.
 1126: 4187.  8792. 13201. 15241. 11722.  5710. 1.675.   338.    57.
 1135:   34.    31.    23.    31.    27.    24.    30.    16.    23.

 1301:   16.    16.    15.    19.    17.    18.    12.    17.     9.
 1310:    9.    14.    15.    25.    22.    20.    19.    20.     9.
 1319:   17.    11.    20.    16.     7.     8.    13.    17.     9.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL  LEFT PW   CTS/SEC    %ERR

  1  1  511.08    1339.     1509.    2.66   1022.58  1014   17  2.231E 00   4.9
  2  3  562.27     785.      430.    1.97   1124.88  1111   28  1.309E 00   5.2
  3  3  564.21   62272.      367.    1.94   1128.75  1111   28  1.038E 02   0.4
  4  1  602.82    2122.      391.    1.93   1205.91  1194   22  3.537E 00   2.5
  5  1  645.95     133.      462.    1.96   1292.11  1288   26  2.211E-01  24.5
```

```
*****************************●***************************************
****************** 10 JAN 1980 10:26:18 AM  *****●***********
********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q358C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   13447.00       UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  FFF.TAB1
********************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1255:02 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:      610. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                   *
********************************************************************
                                   *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                   *
********************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                                  1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
------------------------------------------------------------------------

%-COPPER        511.2     1656.     1817.    0.0212     0.0009       4.3
%-ANTIMONY      564.2      420.    75021.    0.5297     0.0025       0.5
%-ARSENIC       657.4      236.        0. <  0.0037     NOT DETECTABLE

 1009:   102.    86.   116.    96.    91.    94.   113.   104.   118.
 1018:   147.   195.   259.   303.   370.   368.   319.   312.   162.
 1027:   157.   104.    94.    82.    92.    91.    79.    89.    84.

 1117:   198.   267.   315.   301.   283.   263.   394.   699.  2002.
 1126:  5090. 10556. 16062. 18168. 14008.  6790.  2027.   333.    72.
 1135:    42.    38.    31.    33.    29.    25.    32.    31.    31.

 1301:    17.    24.    13.    16.    20.    16.    12.    19.    16.
 1310:    17.    23.    13.    23.    24.    25.    25.    18.    18.
 1319:    12.     9.    13.    13.    17.    13.    11.    14.    18.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1. 511.16    1817.    1656.   3.07  1022.72 1014   18 3.029E 00   3.9
  2  6. 561.50    1421.     411.   1.63  1123.33 1107   43 2.369E 00   3.3
  3  6. 564.20   75021.     420.   1.95  1128.73 1107   43 1.250E 02   0.4
  4  1. 602.84    2418.     462.   1.99  1205.96 1196   24 4.029E 00   2.4
  5  1. 646.12     187.     183.   2.66  1292.44 1287   12 3.121E-01  12.6
```

```
*****************************************●*********************************************
****************** 10 JAN 1980 10:27:26 AM  *****●***********
*****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q359A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    12453.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                          *
ACQUISITION DATE:  7JAN80 2240:26 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                  *
*********************************************************************
                                  *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:       -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                                  *
*********************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                   1 SIGMA
ELEMENT          ENERGY    BKGND      AREA     CONCENTR.   ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER         511.1     2048.     3568.     0.0208     0.0006      2.9
%-ANTIMONY       564.2      583.    77014.     0.5048     0.0024      0.5
%-ARSENIC        657.3      293.       88.     0.0033     0.0010     29.6

 1009:   102.    105.    109.    101.     88.    105.    110.    145.    173.
 1018:   211.    318.    397.    574.    626.    672.    509.    444.    352.
 1027:   196.    136.    116.     90.     96.     80.    100.     93.     91.

 1117:   331.    393.    454.    379.    312.    295.    394.    703.   1956.
 1126:  5223.  10565.  16838.  18769.  14307.   7046.   1963.    341.     64.
 1135:    42.     35.     48.     44.     34.     37.     40.     30.     39.

 1301:    22.     18.     14.     23.     13.     14.     12.     23.     22.
 1310:    23.     20.     19.     34.     40.     47.     29.     30.     27.
 1319:    19.     24.     27.     16.     22.     25.     20.     22.     20.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY      AREA     BKGND    FWHM   CHANNEL LEFT PW    CTS/SEC     %ERR

  1  1  511.09     3568.     2048.    3.07   1022.59 1011    21 5.947E 00    2.5
  2  3  561.07     1665.      925.    2.64   1122.48 1111    48 2.775E 00    3.6
  3  3  564.20    77014.      583.    1.94   1128.72 1111    48 1.284E 02    0.4
  4  1  602.86     2210.      383.    1.98   1205.99 1197    17 3.684E 00    2.5
  5  1  645.90      159.      254.    2.18   1292.01 1286    13 2.648E-01   16.2
  6  1  657.26       88.      293.    1.87   1314.70 1311    13 1.467E-01   29.5
```

```
***********************************************●*********************************************
****************** 10 JAN 1980 10:28:38 AM   *****●***********
*********************************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 11.53:00
SAMPLE IDENTIFICATION:   Q359B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    12274.00          UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
****************************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2250:49 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                    *
****************************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                                    *
****************************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                    1 SIGMA
ELEMENT         ENERGY    BKGND      AREA     CONCENTR.   ERROR       %ERROR
----------------------------------------------------------------------------

%-COPPER         511.0    2068.     3767.      0.0225     0.0006        2.9
%-ANTIMONY       564.2     400.    78273.      0.5215     0.0024        0.5
%-ARSENIC        657.5     294.       53. <    0.0031     NOT DETECTABLE

 1009:    92.   100.   100.    95.   104.   107.    96.   137.   155.
 1018:   213.   313.   475.   606.   695.   652.   593.   464.   309.
 1027:   186.   142.   128.   125.    93.    83.    93.    99.    83.

 1117:   282.   404.   450.   420.   317.   293.   391.   731.  1995.
 1126:  5387. 11006. 16895. 18802. 14518.  7010.  1991.   357.    76.
 1135:    41.    26.    42.    40.    26.    38.    22.    28.    33.

 1301:    16.    23.    20.    21.    10.    18.    13.    27.    15.
 1310:    17.    15.    32.    32.    43.    47.    43.    28.    24.
 1319:    10.    17.    14.    17.    14.    17.    15.    18.    24.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.02    3767.    2068.    2.97  1022.46 1011   22 6.278E 00   2.4
  2  3  560.56    1733.     620.    2.44  1121.45 1107   31 2.889E 00   3.1
  3  3  564.19   78273.     400.    1.95  1128.71 1107   31 1.305E 02   0.4
  4  1  602.89    2172.     475.    2.00  1206.04 1197   20 3.619E 00   2.6
  5  1  645.97     125.     992.    2.09  1292.15 1284   31 2.089E-01  36.6
  6  1  657.49      53.     294.    2.35  1315.17 1314   11 8.898E-02  47.5
```

```
***************************************●***************************●***************
****************    10 JAN 1980 10:29:49 AM    *****●***********
***********************************************************************

9111.9065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q359C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    12112.00          UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*********************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2301:12 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        611. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                    *
*********************************************************************
                                    *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                    *
*********************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                      1 SIGMA
ELEMENT          ENERGY     BKGND       AREA    CONCENTR.    ERROR      %ERROR
-------------------------------------------------------------------------------

%-COPPER         511.0      2394.       4050.    0.0247      0.0007       2.8
%-ANTIMONY       564.2       463.      80850.    0.5469      0.0025       0.5
%-ARSENIC        657.1       220.        252.    0.0097      0.0010      10.8

  1009:    99.    106.    108.    115.    118.    123.    142.    134.   175.
  1018:   234.    317.    507.    673.    770.    731.    656.    478.   339.
  1027:   184.    161.    140.    113.    101.     92.     72.     95.    90.

  1117:   306.    448.    480.    401.    345.    315.    384.    727.  1967.
  1126:  5372.  11280.  17458.  19579.  15018.   7411.   2179.    386.    74.
  1135:    51.     49.     33.     29.     32.     36.     44.     35.    31.

  1301:    15.     16.     23.     16.     13.     12.     11.     17.    15.
  1310:    19.     19.     34.     33.     47.     36.     38.     27.    27.
  1319:    21.     21.     15.     22.     21.     23.     12.     13.     8.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.03     4050.     2394.    2.84   1022.46 1011   24 6.749E 00   2.3
  2  2  560.38     1702.      727.    2.40   1121.10 1108   33 2.836E 00   3.3
  3  2  564.20    80850.      463.    1.95   1128.73 1108   33 1.347E 02   0.4
  4  1  602.85     2295.      375.    1.98   1205.97 1198   15 3.825E 00   2.4
  5  1  646.04      159.      296.    2.13   1292.28 1283   15 2.644E-01  17.3
  6  1  657.05      252.      220.    4.02   1314.29 1307   20 4.192E-01  10.5
```

```
***************************************************************
*****************  10 JAN 1980 10:31:00 AM  *******************
***************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q360A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   10138.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                   *
ACQUISITION DATE:  7JAN80 2311:38 * FWHM(1332)        2.390
PRESET TIME(LIVE):     600. SEC   * SENSITIVITY:      5.000
ELAPSED REAL TIME:     609. SEC   * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:     600. SEC   * NBR ITERATIONS:   10.
                                   *
*****************************************************************
                                   *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                   *
*****************************************************************


UNKNOWN SAMPLE REPORT

                   PEAK                             1 SIGMA
ELEMENT          ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
-------------------------------------------------------------------------------

%-COPPER          511.1    2087.     2248.    0.0166     0.0006        3.9
%-ANTIMONY        564.2     346.    66338.    0.5371     0.0026        0.5
%-ARSENIC         657.3     280.      136.    0.0063     0.0012       19.6

  1009:    78.    88.    88.    88.   105.    90.   105.   100.   132.
  1018:   152.   221.   318.   351.   476.   443.   408.   337.   195.
  1027:   155.   115.    98.    73.    80.    91.    72.    78.    65.

  1117:   208.   259.   278.   275.   244.   266.   344.   626.  1659.
  1126:  4497.  9120. 14083. 16111. 12508.  5957.  1681.   311.    55.
  1135:    33.    28.    27.    27.    36.    23.    29.    28.    28.

  1301:    12.    19.    17.    11.    15.    12.    24.    13.    14.
  1310:    14.    16.    16.    29.    28.    37.    24.    15.    23.
  1319:    13.    13.    14.    12.     8.    13.    13.    10.    10.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

  PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

   1  1  511.09    2248.    2087.   2.85  1022.60 1014  23 3.747E 00    3.6
   2  2  559.93     931.     570.   2.17  1120.19 1110  27 1.551E 00    4.9
   3  2  564.21   66338.     346.   1.95  1128.74 1110  27 1.106E 02    0.4
   4  1  602.86    1939.     304.   1.96  1205.99 1198  16 3.232E 00    2.6
   5  1  645.82     136.     146.   2.28  1291.84 1287  11 2.269E-01   15.2
   6  1  657.33     136.     280.   3.23  1314.85 1303  20 2.269E-01   19.4
```

```
*************************************************************************
***************** 10 JAN 1980 10:32:12 AM  *****●***********
*************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q360B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   12238.00      UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************************
                                    *
ACQUISITION DATE:  7JAN80 2322:00 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                    *
*************************************************************************
                                    *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL.:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                    *
*************************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                 1 SIGMA
ELEMENT         ENERGY    BKGND     AREA    CONCENTR.   ERROR      %ERROR
-----------------------------------------------------------------------

%-COPPER        511.1     2532.    2926.     0.0180    0.0006        3.5
%-ANTIMONY      564.2      439.   83429.     0.5606    0.0026        0.5
%-ARSENIC       657.5      383.      88. <   0.0036    NOT DETECTABLE

 1009:  116.   107.   118.   104.   123.   132.   105.   144.   166.
 1018:  219.   280.   373.   465.   605.   587.   522.   399.   225.
 1027:  177.   142.   106.   113.   109.   114.    99.    88.    95.

 1117:  260.   335.   403.   417.   315.   319.   380.   763.  2227.
 1126: 5622. 11714. 17905. 20104. 15465.  7468.  2229.   415.    69.
 1135:   53.    36.    39.    38.    51.    38.    28.    41.    47.

 1301:   21.    19.    28.    22.    22.    17.    28.    11.    15.
 1310:   14.    18.    23.    29.    32.    37.    42.    20.    19.
 1319:   14.    14.    15.    18.    22.    19.    21.    16.    17.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW  CTS/SEC   %ERR

  1  1  511.06    2926.    2532.    2.82  1022.52 1012  24 4.877E 00   3.1
  2  2  561.43    1614.     698.    2.41  1123.20 1108  29 2.689E 00   3.4
  3  2  564.19   83429.     439.    1.96  1128.72 1108  29 1.390E 02   0.3
  4  1  602.81    2424.     552.    2.00  1205.89 1195  24 4.041E 00   2.5
  5  1  646.10     205.     328.    2.77  1292.40 1284  16 3.411E-01  14.3
  6  1  657.48      88.     383.    2.33  1315.15 1307  18 1.467E-01  33.2
```

```
************************************************●********************************************
*******************    10 JAN 1980 10:33:18 AM   *****●***********
********************************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q360C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    9200.000          UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
**********************************************************************
                                           *
ACQUISITION DATE:   7JAN80 2332:27  *  FWHM(1332)          2.390
PRESET TIME(LIVE):         600. SEC  *  SENSITIVITY:        5.000
ELAPSED REAL TIME:         608. SEC  *  SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:         600. SEC  *  NBR ITERATIONS:    10.
                                           *
**********************************************************************
                                           *
DETECTOR: GELI-8                       *  LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06  *  ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803           *  HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV       *  ABUNDANCE LIMIT:   85.00%
                                           *
**********************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                   1 SIGMA
ELEMENT         ENERGY    BKGND      AREA     CONCENTR.    ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER        511.0    1750.     2237.      0.0185     0.0007       3.8
%-ANTIMONY      564.2     351.    64127.      0.5742     0.0028       0.5
%-ARSENIC       657.4     274.       0.  <   0.0041      NOT DETECTABLE

 1009:     91.    94.    79.    84.    85.   101.    82.   101.   129.
 1018:    163.   230.   321.   378.   423.   451.   409.   277.   207.
 1027:    135.   124.    79.    79.    70.    88.    93.    75.    80.

 1117:    201.   294.   271.   264.   251.   235.   336.   565.  1620.
 1126:   4245.  8939. 13758. 15552. 11985.  5794.  1662.   305.    61.
 1135:     34.    24.    25.    34.    29.    30.    24.    13.    18.

 1301:     21.    23.    28.    18.    17.    15.    14.    12.    10.
 1310:     18.    25.    29.    23.    28.    31.    34.    15.    17.
 1319:     16.    17.    11.    19.    12.     9.    15.    17.    16.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.01    2237.     1750.    2.92   1022.43 1013   20 3.729E 00   3.4
  2  2  564.20   64127.      351.    1.95   1128.73 1113   24 1.069E 02   0.4
  3  2  581.09    1186.      -40.    2.38   1162.49 1113   24 1.977E 00   2.8
  4  1  602.83    1839.      374.    2.02   1205.93 1197   17 3.064E 00   2.8
  5  1  649.96     196.      560.   12.82   1300.12 1285   35 3.267E-01  18.5
```

```
*********************************************************************
******************* 10 JAN 1980 10:34:33 AM  ***********************
*********************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q361A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   12504.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1305:24 * FWHM(1332)          2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:       609. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:     10.
                                   *
*************************************************************************
                                   *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                   *
*************************************************************************


UNKNOWN SAMPLE REPORT


                    PEAK                              1 SIGMA
ELEMENT           ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
------------------------------------------------------------------------------

%-COPPER           511.0    2076.     1784.     0.0226     0.0010       4.6
%-ANTIMONY         564.2     346.    67469.     0.5133     0.0025       0.5
%-ARSENIC          657.4     276.       0. <    0.0043     NOT DETECTABLE

  1009:    91.    79.    83.    99.    88.    96.    90.    108.   112.
  1018:   132.   209.   245.   335.   387.   379.   324.   247.   193.
  1027:   124.   118.   113.    67.    92.    74.    91.    80.    60.

  1117:   240.   306.   340.   319.   253.   251.   332.   638.  1704.
  1126:  4534.  9340. 14269. 16399. 12610.  6178.  1806.   296.    67.
  1135:    50.    29.    29.    32.    27.    27.    28.    26.    32.

  1301:    22.    14.    17.    13.    13.    13.    15.    18.     6.
  1310:    19.    17.    16.    27.    37.    36.    34.    19.    23.
  1319:    11.    14.    17.    17.    13.    13.    15.    16.    11.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.02   1784.    2076.    2.84  1022.45 1013   24 2.973E 00   4.3
 2  2  564.21  67469.     346.    1.96  1128.74 1107   34 1.124E 02   0.4
 3  2  589.03   1468.     -31.    2.40  1178.35 1107   34 2.446E 00   2.6
 4  1  602.82   2297.     281.    2.08  1205.91 1197   17 3.828E 00   2.3
 5  1  646.14    104.     910.    2.37  1292.48 1281   34 1.731E-01  42.2
```

```
*************************************************************************
******************* 10 [ ]N 1980 10:35:45 AM  ***** ***********
*************************************************************************

9111.9065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q361B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    9414.000         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************************
                                    *
ACQUISITION DATE:  8JAN80 1315:46 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        608. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                    *
*************************************************************************
                                    *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                                    *
*************************************************************************


UNKNOWN SAMPLE REPORT

                    PEAK                                    1 SIGMA
ELEMENT           ENERGY     BKGND       AREA     CONCENTR.   ERROR      %ERROR
-------------------------------------------------------------------------------

%-COPPER           511.1     1827.       1362.    0.0232     0.0013       5.5
%-ANTIMONY         564.2      303.      54051.    0.5472     0.0029       0.5
%-ARSENIC          657.4      240.         0. <   0.0054     NOT DETECTABLE

  1009:    80.    70.    66.    65.    82.    86.    60.    83.    98.
  1018:   115.   147.   199.   248.   271.   223.   259.   205.   158.
  1027:   112.    72.    71.    69.    68.    63.    59.    55.    64.

  1117:   211.   262.   281.   271.   207.   200.   259.   468.  1404.
  1126:  3619.  7585. 11576. 12911. 10116.  4914.  1462.   271.    52.
  1135:    25.    23.    27.    29.    26.    24.    28.    23.    20.

  1301:    14.    16.    11.    15.    16.    10.     9.    14.    14.
  1310:    11.    21.    22.    30.    26.    28.    25.    12.    15.
  1319:    10.    14.    12.    10.     8.    14.     5.    10.    11.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =   1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.09    1362.      1827.    3.21  1022.58 1015   28 2.270E 00   5.2
  2  3  560.32    1017.       525.    2.43  1120.98 1111   26 1.695E 00   4.5
  3  3  564.20   54051.       303.    1.96  1128.73 1111   26 9.009E 01   0.4
  4  1  602.87    1903.       225.    2.06  1206.00 1196   18 3.172E 00   2.5
  5  1  645.96     120.       570.    2.37  1292.13 1284   30 1.993E-01  29.7
```

911.19065 RF LEAD

```
SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   Q361C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   12549.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
**************************************************************
                           *
ACQUISITION DATE:  8JAN80 1326:09 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                           *
**************************************************************
                           *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                           *
**************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.		1 SIGMA ERROR	%ERROR
%-COPPER	511.2	1724.	1816.	0.0234		0.0010	4.3
%-ANTIMONY	564.2	615.	73449.	0.5588		0.0026	0.5
%-ARSENIC	657.4	272.	0. <	0.0043		NOT DETECTABLE	

```
 1009:  100.    93.   118.    99.    98.   109.    99.   117.   117.
 1018:  162.   194.   248.   324.   336.   400.   346.   298.   186.
 1027:  153.   114.    81.   103.    78.    88.   102.    78.    91.

 1117:  244.   330.   354.   353.   294.   286.   357.   672.  1898.
 1126: 4964. 10469. 15908. 17538. 13564.  6721.  1935.   330.    63.
 1135:   32.    35.    40.    27.    28.    32.    35.    18.    34.

 1301:   18.    14.    20.    16.     9.    17.    22.    12.    16.
 1310:    8.    17.    27.    30.    32.    33.    26.    25.    19.
 1319:   11.    15.    13.    11.    22.    16.    13.    21.    16.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.18	1816.	1724.	2.93	1022.78	1013	19	3.026E 00	4.0
2	2	561.33	1255.	873.	2.42	1122.99	1112	50	2.092E 00	4.4
3	2	564.19	73449.	615.	1.96	1128.71	1112	50	1.224E 02	0.4
4	1	602.87	2353.	466.	1.95	1206.01	1196	19	3.922E 00	2.4
5	1	646.06	156.	344.	1.93	1292.32	1281	17	2.595E-01	18.7

```
*****************************************************************
****************** 10 ● 1980 10:38:03 AM  ****●*************
*****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   0362A
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    11345.00        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*****************************************************************
                                    *
ACQUISITION DATE:   8JAN80 1336:31 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                    *
*****************************************************************
                                    *
DETECTOR: GELI-8                    * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:          0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:           -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                    *
*****************************************************************


UNKNOWN SAMPLE REPORT


                    PEAK                              1 SIGMA
ELEMENT            ENERGY    BKGND     AREA    CONCENTR.  ERROR      %ERROR
------------------------------------------------------------------------------

%-COPPER           511.1    2451.     3987.    0.0573    0.0016      2.9
%-ANTIMONY         564.2    2140.    78423.    0.6612    0.0031      0.5
%-ARSENIC          657.4     225.       0. <   0.0044    NOT DETECTABLE

 1009:   118.   105.   106.    96.   103.    97.   121.   133.   165.
 1018:   236.   319.   444.   677.   747.   741.   646.   470.   346.
 1027:   200.   146.   122.    93.    95.    88.    89.    94.    97.

 1117:   165.   176.   203.   196.   249.   311.   412.   725.  2031.
 1126:  5358. 11085. 16724. 18869. 14664.  7072.  2088.   386.    75.
 1135:    42.    41.    43.    44.    32.    25.    24.    25.    27.

 1301:    15.    16.    13.    16.    14.    16.    15.    19.    14.
 1310:    15.    16.    17.    23.    29.    13.    22.    20.    15.
 1319:    11.    17.    13.     9.    19.    13.    13.    15.    14.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY    AREA    BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.06    3987.   2451.   2.81  1022.53 1011   26 6.645E 00  2.4
  2  1  564.20   78423.   2140.   1.96  1128.73 1118   20 1.307E 02  0.4
  3  1  602.83    2494.    483.   1.94  1205.92 1196   21 4.157E 00  2.4
  4  1  645.99     217.    186.   2.17  1292.19 1285   14 3.618E-01 11.2
```

```
*************************************************************************
******************* 10 ● 1980 10:39:11 AM  *****●***********
*************************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  0362B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    14529.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************************
                                       *
ACQUISITION DATE:  8JAN80 1346:53 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:       612. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                       *
*************************************************************************
                                       *
DETECTOR: GE11-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
 KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
 OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                       *
*************************************************************************


UNKNOWN SAMPLE REPORT

                   PEAK                                 1 SIGMA
ELEMENT           ENERGY    BKGND      AREA     CONCENTR.   ERROR      %ERROR
-------------------------------------------------------------------------------

%-COPPER          511.1.    2265.      5056.     0.0573     0.0014      2.5
 %-ANTIMONY       564.2     2289.     93910.     0.6194     0.0028      0.4
 %-ARSENIC        657.4      228.        0. <    0.0035     NOT DETECTABLE

 1009:  148.   137.   123.   142.   107.   129.   147.   159.   212.
 1018:  289.   409.   582.   784.   897.   937.   822.   610.   416.
 1027:  259.   178.   136.   121.   104.    84.   105.   110.   113.

 1117:  168.   194.   221.   279.   276.   289.   466.   853.  2474.
 1126: 6489. 13083. 20017. 22568. 17559.  8510.  2473.   468.   105.
 1135:   51.    41.    40.    35.    39.    39.    45.    36.    33.

 1301:   13.    13.    20.    16.    23.    21.    17.    21.    22.
 1310:   12.    10.    16.    20.    17.    27.    12.    23.    27.
 1319:   15.     7.    20.    16.    14.    17.    26.    17.    22.
              PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.10    5056.     2265.    2.89  1022.60 1012   20 8.426E 00   1.9
  2  1  564.20   93910.     2289.    1.97  1128.73 1118   21 1.565E 02   0.3
  3  1  602.83    3071.      486.    2.00  1205.94 1196   18 5.119E 00   2.1
  4  1  646.01     285.      230.    2.12  1292.23 1285   17 4.748E-01   9.6
```

```
****************************************************************
****************** 10 ●N 1980 10:40:16 AM  *****●***********
****************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  Q362C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   13393.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
****************************************************************
                                 *
ACQUISITION DATE:  8JAN80   34:51 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       617. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                 *
****************************************************************
                                 *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:   85.00%
                                 *
****************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                              1 SIGMA
ELEMENT         ENERGY   BKGND    AREA    CONCENTR.  ERROR    %ERROR
------------------------------------------------------------------

%-COPPER        511.1   3738.   11683.    0.0703    0.0014     2.0
%-ANTIMONY      564.2   3458.  123070.    0.7654    0.0032     0.4
%-ARSENIC       657.4    363.      0. <   0.0033    NOT DETECTABLE

 1009:   171.    184.    163.    186.    189.    210.    208.    251.    366.
 1018:   539.    833.   1246.   1695.   2008.   2014.   1806.   1328.    855.
 1027:   530.    329.    236.    213.    171.    140.    155.    133.    143.

 1117:   263.    300.    304.    346.    363.    407.    579.   1167.   3238.
 1126:  8352.  17232.  26387.  29748.  22986.  11314.   3421.    647.    135.
 1135:    81.     81.     65.     59.     54.     64.     50.     62.     58.

 1301:    33.     25.     34.     29.     18.     23.     21.     27.     34.
 1310:    25.     26.     24.     35.     39.     25.     31.     25.     26.
 1319:    23.     27.     23.     17.     30.     25.     33.     26.     28.
        PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA    BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

 1  1  511.09   11683.   3738.   2.89  1022.59 1011   24 1.947E 01  1.2
 2  1  564.20  123070.   3458.   1.96  1128.73 1119   19 2.051E 02  0.3
 3  1  602.86    3514.    584.   1.91  1205.99 1198   16 5.857E 00  1.9
 4  1  645.82     280.    536.   2.32  1291.84 1283   18 4.660E-01 13.1
```

```
******************************************************************
***************** 10 ● N 1980 10:41:23 AM  ***** ● ***********
******************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-1A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11458.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
******************************************************************
                                      *
ACQUISITION DATE:   8JAN80 1357:19 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:       636. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC  * NBR ITERATIONS:  10.
                                   *
******************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                   *
******************************************************************


UNKNOWN SAMPLE REPORT


                  PEAK                              1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
--------------------------------------------------------------------------
%-COPPER         511.0    4899.       0. <   0.0048    NOT DETECTABLE
%-ANTIMONY       564.2    2006.   275613.   2.3093     0.0081       0.4
%-ARSENIC        657.1     837.      464.   0.0281     0.0029      10.3

  1009:  369.   348.   358.   324.   335.   340.   332.   334.   359.
  1018:  363.   398.   387.   448.   382.   438.   397.   385.   353.
  1027:  346.   309.   324.   325.   356.   291.   354.   325.   324.

  1117: 1024.  1262.  1493.  1391.  1145.  1091.  1457.  2855.  7526.
  1126:19763. 39517. 59288. 66072. 49778. 24551.  7175.  1498.   395.
  1135:  281.   286.   246.   198.   216.   199.   156.   187.   169.

  1301:   68.    61.    79.    60.    70.    54.    56.    63.    85.
  1310:   75.    81.    80.   123.   166.   139.   135.    93.    58.
  1319:   62.    66.    63.    75.    56.    66.    61.    61.    75.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000

PK IT  ENERGY     AREA     BKGND   FWHM  CHANNEL LEFT PW  CTS/SEC    %ERR

 1  2  564.18  275613.    2006.   1.97  1128.68 1110  34 4.594E 02   0.2
 2  2  564.65    6062.    2513.   2.43  1129.63 1110  34 1.010E 01   1.7
 3  1  602.81    8888.    1841.   1.99  1205.88 1196  18 1.481E 01   1.3
 4  1  646.04     714.    1080.   2.27  1292.28 1285  16 1.191E 00   7.5
 5  1  657.06     464.     837.   2.30  1314.30 1307  14 7.730E-01  10.0
```

```
************************************************************************
****************** 10 JAN 1980 10:42:30 AM  *****************
************************************************************************

9111.9065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-1B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   10540.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  FFF.TAB1
************************************************************************
                                    *
ACQUISITION DATE:  8JAN80   56:12 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        640. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                    *
************************************************************************
                                    *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803          * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                                    *
************************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                              1 SIGMA
ELEMENT          ENERGY    BKGND      AREA     CONCENTR.    ERROR      %ERROR
------------------------------------------------------------------------------

%-COPPER          511.1    5502.     1159.      0.0090     0.0009       9.7
%-ANTIMONY        564.2    2298.   318889.      2.5297     0.0087       0.3
%-ARSENIC         657.2    1068.      603.      0.0281     0.0025       9.0

  1009:   392.   394.   435.   422.   403.   420.   405.   422.   416.
  1018:   418.   447.   519.   534.   596.   551.   568.   488.   452.
  1027:   427.   373.   387.   358.   368.   396.   355.   343.   354.

  1117: 1329.  1681.  1940.  1680.  1384.  1213.  1618.  3138.  8782.
  1126:22413. 45381. 68630. 76280. 58318. 28521.  8325.  1806.   540.
  1135:  387.   331.   283.   257.   237.   284.   224.   203.   206.

  1301:    84.    85.    87.    89.    80.    94.    72.    98.    77.
  1310:    79.   111.   111.   170.   190.   213.   175.   122.   102.
  1319:    81.    79.    80.    66.    64.    85.    72.    81.    62.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.11    1159.      5502.    2.87  1022.63 1016   14 1.932E 00   9.5
  2  2  560.54    6668.      3434.    2.44  1121.42 1109   35 1.111E 01   1.7
  3  2  564.18  318889.      2298.    1.97  1128.69 1109   35 5.315E 02   0.2
  4  1  602.84    8960.      2255.    2.01  1205.94 1195   20 1.493E 01   1.3
  5  1  645.96     572.      1116.    1.76  1292.13 1287   12 9.527E-01   9.3
  6  1  657.24     603.      1068.    2.21  1314.66 1309   14 1.005E 00   8.7
```

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-1C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    10886.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME: , EFF.TAB1
***************************************************************************
                                     *
ACQUISITION DATE:  8JAN80 1408:10 * FWHM(1X32)          2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:        5.000
ELAPSED REAL TIME:      636. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                     *
***************************************************************************
                                     *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                                     *
***************************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                    1 SIGMA
ELEMENT           ENERGY    BKGND      AREA     CONCENTR.   ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER          511.0     5177.       0. <   0.0052     NOT DETECTABLE
%-ANTIMONY        564.2     2125.   287541.    2.5407     0.0089        0.3
%-ARSENIC         657.1      699.      425.    0.0272     0.0028       10.4

 1009:  371.   372.   369.   367.   366.   312.   372.   375.   366.
 1018:  363.   408.   394.   425.   428.   476.   445.   401.   390.
 1027:  397.   309.   309.   372.   393.   334.   339.   320.   323.

 1117:  990.  1273.  1441.  1368.  1172.  1142.  1413.  2702.  7456.
 1126:19715. 39447. 60983. 68562. 53920. 26866.  8268.  1719.   450.
 1135:  308.   280.   243.   222.   195.   216.   219.   206.   195.

 1301:   70.    72.    74.    63.    61.    67.    80.    64.    56.
 1310:   72.    74.    92.   125.   167.   176.   117.    91.    57.
 1319:   68.    66.    73.    66.    81.    63.    69.    53.    72.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA     BKGND   FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

  1  2  561.96    5457.     2980.   2.43  1124.24 1110   31 9.095E 00  2.0
  2  2  564.21  287541.     2125.   1.98  1128.75 1110   31 4.792E 02  0.2
  3  1  602.85    9466.     1981.   1.98  1205.97 1195   19 1.578E 01  1.2
  4  1  646.10     755.     1593.   2.34  1292.40 1283   26 1.258E 00  8.3
  5  1  657.10     425.      699.   1.85  1314.38 1309   11 7.075E-01 10.1
```

```
****************************************************************
***************** 10 ● N 1980 10:44:54 AM  ****●***********
****************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-2A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   9714.000      UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************
                               *
ACQUISITION DATE:  8JAN80  118:00 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:      634. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC * NBR ITERATIONS:   10.
                               *
************************************************************
                               *
DETECTOR: GELI-8             * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803     * HALF LIFE RATIO:   8.00
OFFSET:       -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                               *
************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                              1 SIGMA
ELEMENT         ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER        511.1     4167.     1003.    0.0087     0.0008      9.8
%-ANTIMONY      564.2     1894.   267111.    2.3080     0.0081      0.4
%-ARSENIC       657.2      783.      499.    0.0255     0.0024      9.5

   1009:  360.   351.   334.   328.   321.   329.   325.   321.   317.
   1018:  363.   377.   385.   438.   494.   467.   489.   411.   336.
   1027:  339.   299.   337.   318.   310.   271.   282.   302.   301.

   1117: 1044.  1457.  1574.  1506.  1189.  1030.  1352.  2687.  6978.
   1126:18682. 37747. 57270. 63509. 49372. 24177.  7137.  1406.   410.
   1135:  241.   197.   230.   205.   195.   163.   175.   159.   168.

   1301:   67.    60.    71.    62.    55.    60.    68.    72.    64.
   1310:   65.    69.    95.   131.   173.   182.   133.    81.    86.
   1319:   51.    64.    58.    47.    61.    60.    64.    42.    48.
           PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  1  511.13     1003.    4167.    2.81  1022.67 1016   13 1.672E 00   9.6
 2  2  560.84     5823.    2737.    2.44  1122.01 1110   28 9.704E 00   1.8
 3  2  564.19   267111.    1894.    1.98  1128.71 1110   28 4.452E 02   0.2
 4  1  602.85     7460.    2464.    1.92  1205.96 1195   22 1.243E 01   1.5
 5  1  645.91      496.    1039.    2.35  1292.02 1284   15 8.260E-01  10.2
 6  1  657.24      499.     783.    2.01  1314.67 1309   13 8.313E-01   9.1
```

```
*****************************************************************************
****************** 10 ●N 1980 10:46:03 AM    *****●***********
*****************************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 11:53:00
SAMPLE IDENTIFICATION:  A/S-2B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    8796.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************************
                                  *
ACQUISITION DATE:   8JAN80  128:47 * FWHM(1332)          2.390
PRESET TIME(LIVE):       600. SEC  * SENSITIVITY:        5.000
ELAPSED REAL TIME:       631. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC  * NBR ITERATIONS:    10.
                                  *
*****************************************************************************
                                  *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:        -0.5932283 KEV      * ABUNDANCE LIMIT:   85.00%
                                  *
*****************************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                                   1 SIGMA
ELEMENT         ENERGY    BKGND       AREA     CONCENTR.   ERROR      %ERROR
---------------------------------------------------------------------------

%-COPPER        511.0     4291.       788.     0.0076     0.0009      12.4
%-ANTIMONY      564.2     1546.    250580.     2.3957     0.0085       0.4
%-ARSENIC       657.3      803.       477.     0.0271     0.0027       9.9

 1009:  324.    309.    331.    309.    302.    302.    324.    313.    326.
 1018:  323.    336.    383.    434.    474.    425.    439.    366.    345.
 1027:  297.    285.    297.    292.    285.    306.    290.    280.    268.

 1117:  978.   1251.   1420.   1285.   1074.    941.   1206.   2361.   6441.
 1126:16966.  34711.  53575.  60202.  46614.  23245.   6901.   1442.    361.
 1135:  225.    211.    178.    186.    160.    160.    156.    158.    162.

 1301:   62.     71.     50.     70.     61.     52.     61.     57.     67.
 1310:   64.     60.     95.    107.    139.    158.    131.    110.     67.
 1319:   57.     52.     52.     49.     57.     61.     51.     58.     58.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000

 PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL  LEFT PW    CTS/SEC    %ERR

  1  1  511.04      788.     4291.    2.29  1022.48 1016    14 1.314E 00  12.3
  2  2  560.89     5219.     2259.    2.43  1122.12 1107    34 8.698E 00   1.9
  3  2  564.20   250580.     1546.    1.97  1128.73 1107    34 4.176E 02   0.2
  4  1  602.85     7381.     1404.    2.03  1205.97 1196    18 1.230E 01   1.4
  5  1  645.99      482.      677.    1.96  1292.18 1287    11 8.037E-01   8.9
  6  1  657.34      477.      803.    2.28  1314.86 1307    15 7.951E-01   9.6
```

```
*************************************************************
****************** 10 [●] 1980 10:47:11 AM  *****[●]**********
*************************************************************

91119065 RF LEAD

SAMPLE DATE:     7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-2C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    12566.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*************************************************************
                              *
ACQUISITION DATE:  8JAN80  139:33 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       651. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                              *
*************************************************************
                              *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                              *
*************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                                  1 SIGMA
ELEMENT         ENERGY    BKGND      AREA     CONCENTR.  ERROR     %ERROR
------------------------------------------------------------------------

%-COPPER        511.3     7692.     1510.     0.0103    0.0009      8.8
%-ANTIMONY      564.2     3246.   389535.     2.6119    0.0088      0.3
%-ARSENIC       657.3     1414.      713.     0.0284    0.0025      8.7

 1009:   526.   522.   534.   474.   529.   480.   504.   529.   519.
 1018:   543.   540.   600.   657.   721.   693.   705.   618.   574.
 1027:   554.   510.   443.   471.   459.   441.   496.   515.   459.

 1117:  1570.  2094.  2345.  2047.  1682.  1553.  1923.  3780. 10405.
 1126: 26666. 54518. 83358. 92476. 72265. 36138. 11366.  2396.   771.
 1135:   562.   491.   430.   363.   364.   385.   342.   321.   372.

 1301:   110.   123.   107.   103.   114.   116.   105.   109.   117.
 1310:   103.   139.   146.   197.   239.   262.   225.   156.   123.
 1319:   110.    87.    95.    95.    95.   112.   124.    89.   116.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC   %ERR

 1  1  511.29     1510.     7692.    3.00  1022.99 1014  16 2.517E 00   8.6
 2  2  560.49     7863.     4678.    2.45  1121.31 1111  30 1.310E 01   1.7
 3  2  564.20   389535.     3246.    1.98  1128.73 1111  30 6.492E 02   0.2
 4  1  602.86    11176.     3150.    1.99  1205.98 1195  20 1.863E 01   1.2
 5  1  645.98      736.     1684.    2.05  1292.17 1284  14 1.227E 00   8.7
 6  1  657.25      713.     1414.    2.18  1314.69 1308  14 1.188E 00   8.3
```

```
*******************************************************************
***************** 10 [●]N 1980 10:48:19 AM   *****[●]***********
*******************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-3A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11987.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*******************************************************************
                                  *
ACQUISITION DATE:   8JAN80 1419:00 * FWHM(1332)        2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:        635. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                  *
*******************************************************************
                                  *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL.:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                                  *
*******************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                              1 SIGMA
ELEMENT         ENERGY    BKGND     AREA    CONCENTR.  ERROR      %ERROR
------------------------------------------------------------------------

%-COPPER        511.0     4854.      0. <   0.0046    NOT DETECTABLE
%-ANTIMONY      564.2     2040.   276451.   2.2226    0.0078        0.4
%-ARSENIC       657.4      896.     474.    0.0277    0.0029       10.4

 1009:  393.   347.   332.   345.   344.   354.   321.   358.   349.
 1018:  366.   361.   399.   397.   419.   413.   387.   387.   333.
 1027:  360.   325.   331.   297.   317.   289.   325.   312.   310.

 1117:  991.  1256.  1435.  1336.  1160.  1037.  1347.  2631.  7172.
 1126:18907. 37846. 58316. 65714. 51787. 26416.  8066.  1722.   465.
 1135:  319.   229.   214.   220.   212.   189.   175.   169.   171.

 1301:   62.    73.    75.    63.    65.    55.    67.    67.    77.
 1310:   71.    74.    77.   107.   144.   171.   113.   110.    85.
 1319:   55.    77.    48.    56.    67.    55.    71.    70.    69.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

 1  2  561.93     5268.     2871.    2.44  1124.19 1112  36 8.779E 00   2.0
 2  2  564.21   276451.     2040.    1.99  1128.75 1112  36 4.608E 02   0.2
 3  1  602.88     9111.     1582.    2.03  1206.04 1195  19 1.518E 01   1.2
 4  1  646.10      533.     1160.    1.95  1292.40 1285  16 8.888E-01  10.0
 5  1  657.39      474.      896.    2.19  1314.96 1306  16 7.906E-01  10.0
```

```
**********************************************************************
******************* 10 JAN 1980 10:49:26 AM   *****************
**********************************************************************

9111.9065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   A/S-3B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    13270.00         UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
**********************************************************************
                                        *
ACQUISITION DATE:   8JAN80 1429:46 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600.  SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        644.  SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600.  SEC * NBR ITERATIONS:    10.
                                        *
**********************************************************************
                                        *
DETECTOR: GELI-8                    * LIBRARY:NUCL.LIB1.
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:         0.5003803          * HALF LIFE RATIO:    8.00
OFFSET:          -0.5932283 KEV      * ABUNDANCE LIMIT:   85.00%
                                        *
**********************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                      1. SIGMA
ELEMENT        ENERGY    BKGND      AREA     CONCENTR.     ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER       511.2     5115.      750.      0.0097       0.0014      14.1
%-ANTIMONY     564.2     2659.   348427.      2.5353       0.0086       0.3
%-ARSENIC      657.4     1275.      561.      0.0297       0.0031      10.3

 1009:   460.    424.    469.    473.    450.    463.    420.    447.    452.
 1018:   442.    468.    464.    531.    586.    573.    553.    481.    471.
 1027:   399.    414.    392.    401.    424.    404.    378.    398.    413.

 1117:  1251.   1608.   1784.   1724.   1459.   1296.   1721.   3463.   9326.
 1126: 24043.  48151.  73654.  82230.  64755.  33093.  10379.   2235.    646.
 1135:   430.    381.    317.    338.    307.    287.    249.    277.    241.

 1301:   101.    104.     95.     83.     92.     84.     85.     92.     97.
 1310:    90.     99.    123.    156.    161.    199.    188.    134.     84.
 1319:   105.     75.     89.    107.     71.     78.     68.     89.     90.
              PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1   511.19      750.     5115.    2.20  1022.78 1017   12 1.250E 00  14.0
  2  2   563.09     7151.     3553.    2.46  1126.50 1110   42 1.192E 01   1.7
  3  2   564.21   348427.     2659.    2.00  1128.74 1110   42 5.807E 02   0.2
  4  1   602.86    11494.     2617.    2.01  1205.99 1196   19 1.916E 01   1.1
  5  1   645.95      795.     1197.    2.30  1292.11 1286   12 1.325E 00   7.1
  6  1   657.45      561.     1275.    2.45  1315.08 1306   15 9.356E-01   9.9
```

```
***************************************************************
****************** 10 JAN 1980 10:50:38 AM   ******************
***************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-3C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    11676.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***************************************************************
                                    *
ACQUISITION DATE:  8JAN80 1440:44 * FWHM(1332)          2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:       643. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                    *
***************************************************************
                                    *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV    * ABUNDANCE LIMIT:   85.00%
                                    *
***************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                                1 SIGMA
ELEMENT         ENERGY   BKGND       AREA    CONCENTR.   ERROR       %ERROR
-------------------------------------------------------------------------
%-COPPER        511.3    6300.       888.    0.0131      0.0017      13.2
%-ANTIMONY      564.2    2584.     331980.   2.7507      0.0094       0.3
%-ARSENIC       657.3    1208.       440.    0.0266      0.0033      12.4

 1009:   471.    416.    436.    408.    430.    416.    393.    407.    442.
 1018:   400.    419.    469.    509.    502.    556.    501.    456.    450.
 1027:   452.    397.    413.    388.    378.    364.    391.    383.    396.

 1117: 1157.   1562.   1742.   1628.   1403.   1311.   1741.   3318.   8920.
 1126:23055.  46191.  69993.  78808.  61388.  31363.  10121.   2187.    663.
 1135:   417.    338.    339.    266.    298.    284.    265.    243.    259.

 1301:   109.     81.     79.    104.     83.     85.     95.     82.     92.
 1310:    88.     86.    118.    143.    182.    206.    157.    128.    101.
 1319:    70.    103.     82.     86.     76.     76.     87.     76.     64.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW    CTS/SEC    %ERR

  1  1  511.35     888.      6300.    3.01  1023.10 1015   16 1.480E 00  13.1
  2  2  560.04    5914.      3467.    2.23  1120.41 1111   30 9.857E 00   1.9
  3  2  564.20  331980.      2584.    2.00  1128.73 1111   30 5.533E 02   0.2
  4  1  602.86   11147.      2794.    2.00  1206.00 1195   22 1.858E 01   1.2
  5  1  645.97     669.      1194.    1.81  1292.15 1286   12 1.114E 00   8.3
  6  1  657.29     440.      1208.    1.84  1314.76 1308   14 7.325E-01  12.2
```

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-4A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    13736.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME: .EFF.TAB1
***************************************************************
                                    *
ACQUISITION DATE:   8JAN80 1451:38 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC   * SENSITIVITY:      5.000
ELAPSED REAL TIME:      643. SEC   * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC   * NBR ITERATIONS:  10.
                                    *
***************************************************************
                                    *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                    *
***************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	5712.	0. <	0.0045	NOT DETECTABLE	
%-ANTIMONY	564.2	2388.	328153.	2.3157	0.0079	0.3
%-ARSENIC	657.2	1245.	830.	0.0429	0.0032	7.4

```
1009:   413.   460.   422.   439.   409.   425.   400.   451.   446.
1018:   412.   422.   494.   423.   475.   452.   479.   447.   424.
1027:   411.   376.   400.   395.   391.   389.   401.   403.   399.

1117: 1536.  2140.  2230.  2074.  1680.  1379.  1707.  3380.  8984.
1126:22999. 45514. 68790. 77534. 61183. 31445. 10091.  2356.   649.
1135:   425.   339.   317.   285.   282.   276.   252.   239.   251.

1301:    80.    88.    91.    88.    76.    90.    92.    69.    84.
1310:   102.    74.   147.   193.   267.   256.   236.   154.   109.
1319:    88.    70.    68.    68.    92.    87.    83.    75.    81.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	8	560.04	13711.	5856.	4.04	1120.41	1108	33	2.285E 01	1.2
2	8	564.21	328153.	2388.	2.00	1128.75	1108	33	5.469E 02	0.2
3	1	602.88	10973.	2800.	2.04	1206.02	1195	23	1.829E 01	1.2
4	1	645.92	777.	1524.	2.09	1292.05	1287	16	1.296E 00	8.0
5	1	657.24	830.	1245.	2.05	1314.66	1309	15	1.383E 00	6.9

```
*********************************************************************
****************** 10 JAN 1980 10:52:57 AM *****************
*********************************************************************

9111.9065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-4B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    11244.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1502:33 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        638. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                   *
*********************************************************************
                                   *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:          0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:           -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                   *
*********************************************************************


UNKNOWN SAMPLE REPORT


               PEAK                                1 SIGMA
ELEMENT        ENERGY    BKGND      AREA    CONCENTR.    ERROR      %ERROR
---------------------------------------------------------------------------

%-COPPER       511.0     5171.        0. <   0.0053    NOT DETECTABLE
%-ANTIMONY     564.2     2208.   297759.    2.5719     0.0089        0.3
%-ARSENIC      657.3     1084.      697.    0.0442     0.0036        8.1

 1009:  369.   359.   405.   374.   416.   428.   327.   364.   392.
 1018:  406.   436.   385.   408.   443.   429.   429.   394.   375.
 1027:  364.   346.   332.   328.   357.   347.   340.   334.   347.

 1117: 1373.  1931.  2107.  1876.  1427.  1177.  1390.  2880.  7701.
 1126:20073. 41186. 62751. 70882. 56201. 28106.  8675.  1871.   542.
 1135:  320.   311.   264.   269.   238.   221.   217.   213.   218.

 1301:   92.    77.    78.    76.    79.    71.   100.    58.    77.
 1310:   84.    89.   115.   163.   185.   260.   201.   127.    75.
 1319:   69.    73.    66.    69.    73.    79.    78.    70.    72.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  6  559.54    10967.     4468.    3.23  1119.41 1111   37 1.828E 01   1.3
  2  6  564.21   297759.     2208.    1.98  1128.75 1111   37 4.963E 02   0.2
  3  1  602.89    10015.     2033.    2.05  1206.05 1195   19 1.669E 01   1.2
  4  1  646.00      579.     1026.    1.88  1292.20 1286   12 9.657E-01   8.9
  5  1  657.33      697.     1084.    1.96  1314.84 1306   15 1.162E 00   7.7
```

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
 SAMPLE IDENTIFICATION:  A/S-4C
 TYPE OF SAMPLE:  UNKNOWN
 SAMPLE QUANTITY:    12130.00          UNITS:  UG
 SAMPLE GEOMETRY:  .25 IN
 EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************
                             *
 ACQUISITION DATE:  8JAN80  245:27 * FWHM(1332)         2.390
 PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
 ELAPSED REAL TIME:       650. SEC * SHAPE PARAMETER : 15.0 %
 ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                             *
************************************************************
                             *
 DETECTOR: GEL1-8                 * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
 KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
 OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                             *
************************************************************


 UNKNOWN SAMPLE REPORT

                 PEAK                                1 SIGMA
 ELEMENT        ENERGY    BKGND      AREA    CONCENTR.  ERROR      %ERROR
 ----------------------------------------------------------------------

 %-COPPER       511.1     6657.      736.    0.0055    0.0009      16.2
 %-ANTIMONY     564.2     2895.   378896.    2.6628    0.0090       0.3
 %-ARSENIC      657.2     1290.     1211.    0.0515    0.0029       5.7

 1009:    476.    519.    509.    498.    460.    487.    490.    518.    518.
 1018:    502.    483.    583.    558.    635.    616.    569.    547.    532.
 1027:    483.    489.    473.    445.    452.    430.    409.    487.    462.

 1117:   2074.   2848.   3171.   2737.   1990.   1573.   1950.   3762.  10156.
 1126:  26519.  53359.  80731.  90505.  70288.  34214.  10325.   2246.    726.
 1135:    464.    439.    403.    374.    344.    329.    303.    316.    306.

 1301:     97.    123.    111.    117.    128.    124.    105.     94.     89.
 1310:    113.    126.    180.    261.    344.    376.    281.    184.    115.
 1319:    111.    100.     90.    111.     78.     83.    106.     96.     93.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.14      736.      6657.   2.49  1022.69 1018   14 1.226E 00  16.1
  2  5  559.52    16201.      5313.   3.09  1119.37 1109   33 2.700E 01   1.0
  3  5  564.19   378896.      2895.   1.98  1128.72 1109   33 6.315E 02   0.2
  4  1  602.85    11136.      2668.   2.00  1205.97 1198   16 1.856E 01   1.2
  5  1  646.15      752.      1582.   2.06  1292.50 1286   15 1.254E 00   8.3
  6  1  657.22     1211.      1290.   2.04  1314.63 1309   15 2.019E 00   5.1
```

```
***********************************************************************
****************  10 ● N 1980 10:55:16 AM   *****●***********
***********************************************************************

9111.9065 RF LEAD


SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-5A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11543.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1513:23 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       635. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                   *
*****************************************************************
                                   *
DETECTOR: GEL 1-8                 * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:       -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                                   *
*****************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                              1 SIGMA
ELEMENT        ENERGY     BKGND      AREA     CONCENTR.    ERROR      %ERROR
------------------------------------------------------------------------------

%-COPPER       511.0      4612.       0. <    0.0049    NOT DETECTABLE
%-ANTIMONY     564.2      1866.   273035.     2.3016    0.0081       0.4
%-ARSENIC      657.3       791.      705.     0.0438    0.0032       7.3

 1009:  366.   358.    358.    348.    351.   326.    366.    334.    330.
 1018:  382.   369.    381.    371.    354.   373.    391.    323.    350.
 1027:  326.   328.    348.    318.    308.   298.    326.    301.    306.

 1117: 1230.  1649.   1884.   1615.   1286.  1112.   1395.   2561.   7237.
 1126:18367. 37316.  57893.  65481.  51681. 26032.   8255.   1676.    450.
 1135:  287.   252.    220.    217.    195.   195.    200.    188.    132.

 1301:   65.    52.     64.     72.     55.    64.     75.     71.     52.
 1310:   68.    97.     94.    136.    190.   197.    183.    129.     89.
 1319:   65.    66.     52.     50.     53.    65.     61.     61.     66.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM   CHANNEL LEFT PW   CTS/SEC    %ERR

  1  8  560.03    12018.     5112.    4.38   1120.39 1109   31 2.003E 01   1.2
  2  8  564.22   273035.     1866.    1.97   1128.77 1109   31 4.551E 02   0.2
  3  1  602.87     9152.     1539.    1.95   1206.02 1197   17 1.525E 01   1.2
  4  1  646.01      616.      923.    2.26   1292.22 1286   13 1.027E 00   8.1
  5  1  657.32      705.      791.    2.36   1314.83 1309   14 1.175E 00   6.8
```

```
91119065 RF LEAD
```

```
SAMPLE DATE:    7JAN80 11:53:00
SAMPLE IDENTIFICATION:  A/S-5B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   12023.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************************
                                        *
ACQUISITION DATE:  8JAN80  307:20 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      643. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                  *
************************************************************************
                                        *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                  *
************************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	6096.	0. <	0.0028	NOT DETECTABLE	
%-ANTIMONY	564.2	2376.	335524.	2.3881.	0.0081.	0.3
%-ARSENIC	657.3	1219.	859.	0.0372	0.0027	7.2

```
1009:   459.    379.    434.    429.    433.    408.    410.    441.    446.
1018:   415.    463.    493.    501.    503.    540.    521.    454.    477.
1027:   435.    407.    366.    397.    375.    427.    398.    402.    401.

1117: 1726.   2438.   2706.   2454.   1753.   1424.   1762.   3363.   8867.
1126:23161.  46945.  71425.  80501.  62781.  30373.   9309.   2008.    585.
1135:   395.    344.    332.    281.    272.    282.    251.    219.    261.

1301:   119.     84.     90.     94.     84.     94.     89.     89.     89.
1310:    99.     99.    138.    220.    295.    300.    266.    147.     98.
1319:    80.     83.     98.     99.     96.     77.     87.     71.     72.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION = 1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	6	559.56	14718.	4645.	3.23	1119.45	1107	37	2.453E 01	1.1
2	6	564.20	335524.	2376.	1.97	1128.73	1107	37	5.592E 02	0.2
3	1	602.86	9783.	2631.	2.01	1205.99	1199	19	1.631E 01	1.3
4	1	646.18	630.	1173.	2.10	1292.57	1287	12	1.050E 00	8.7
5	1	657.25	859.	1219.	1.82	1314.70	1309	13	1.432E 00	6.7

91119065 RF LEAD

```
SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-5C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    10971.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*********************************************************************
                                      *
ACQUISITION DATE:  8JAN80 1524:09 * FWHM(1332)          2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:        5.000
ELAPSED REAL TIME:        637. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:    10.
                                      *
*********************************************************************
                                      *
DETECTOR: GEL1-8                    * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803          * HALF LIFE RATIO:    8.00
OFFSET:        -0.5932283 KEV       * ABUNDANCE LIMIT:   85.00%
                                      *
*********************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	4989.	0. <	0.0054	NOT DETECTABLE	
%-ANTIMONY	564.2	2098.	289264.	2.5705	0.0090	0.3
%-ARSENIC	657.2	893.	697.	0.0457	0.0035	7.6

```
1009:  393.   384.   381.   385.   403.   410.   318.   389.   357.
1018:  353.   378.   372.   394.   436.   416.   411.   386.   369.
1027:  342.   386.   364.   336.   320.   345.   336.   361.   323.

1117: 1316.  1776.  2034.  1898.  1315.  1225.  1471.  2709.  7646.
1126:19631. 39769. 60776. 69333. 54679. 27334.  8446.  1860.   487.
1135:  332.   309.   237.   218.   225.   220.   205.   189.   190.

1301:   71.    74.    74.    70.    87.    72.    73.    69.    58.
1310:   67.   100.   124.   158.   202.   184.   185.   120.    81.
1319:   76.    75.    58.    65.    63.    63.    70.    53.    65.
          PULSE-PILE-UP CORRECTED DATA. CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	6	559.98	10903.	4643.	3.58	1120.29	1110	34	1.817E 01	1.3
2	6	564.22	289264.	2098.	1.98	1128.76	1110	34	4.821E 02	0.2
3	1	602.88	9737.	1692.	2.00	1206.03	1198	17	1.623E 01	1.2
4	1	646.09	551.	1108.	2.02	1292.38	1286	13	9.176E-01	9.6
5	1	657.18	697.	893.	2.40	1314.55	1309	14	1.161E 00	7.2

```
91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-6A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   15409.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************************
                                  *
ACQUISITION DATE:   8JAN80  329:08 * FWHM(1.332)         2.390
PRESET TIME(LIVE):      600. SEC   * SENSITIVITY:        5.000
ELAPSED REAL TIME:      654. SEC   * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC   * NBR ITERATIONS:    10.
                                  *
************************************************************************
                                  *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                  *
************************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	7579.	0. <	0.0025	NOT DETECTABLE	
%-ANTIMONY	564.2	3521.	413890.	2.3075	0.0077	0.3
%-ARSENIC	657.2	1314.	1192.	0.0407	0.0024	5.8

```
1009:  579.  576.  581.  525.  566.  551.  513.  503.  558.
1018:  575.  603.  593.  649.  672.  638.  610.  605.  559.
1027:  503.  511.  519.  481.  490.  452.  457.  493.  499.

1117: 2059. 2828. 3297. 2991. 2049. 1743. 2096. 3964. 10550.
1126:27749.56713.86854.99656.78368.39472.12895. 2848.  869.
1135:  621.  531.  447.  461.  438.  386.  395.  357.  341.

1301:  125.  124.  124.  121.  109.  134.  138.  106.  113.
1310:  108.  162.  187.  290.  342.  357.  328.  207.  131.
1319:  126.  108.  111.  123.  110.  114.   93.  118.  111.
        PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	5	559.57	16602.	6038.	3.11	1119.47	1109	30	2.767E 01	1.0
2	5	564.22	413890.	3521.	1.98	1128.77	1109	30	6.898E 02	0.2
3	1	602.88	12443.	2957.	2.01	1206.03	1197	18	2.074E 01	1.1
4	1	645.96	926.	1804.	2.16	1292.12	1285	15	1.543E 00	7.3
5	1	657.23	1192.	1314.	2.18	1314.65	1309	12	1.987E 00	5.2

```
*************************************************************************
***************** 10 ●N 1980 10:59:50 AM   *****●***********
*************************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   A/S-6B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   11218.00        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*************************************************************************
                                  *
ACQUISITION DATE:   8JAN80  340:14 * FWHM(1332)         2.390
PRESET TIME(LIVE):        600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:        641. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:        600. SEC * NBR ITERATIONS:   10.
                                  *
*************************************************************************
                                  *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                  *
*************************************************************************


UNKNOWN SAMPLE REPORT

                  PEAK                                1 SIGMA
ELEMENT         ENERGY    BKGND     AREA    CONCENTR.   ERROR      %ERROR
----------------------------------------------------------------------------

%-COPPER        511.0    4623.      764.    0.0065     0.0009      13.2
%-ANTIMONY      564.2    2272.   315454.    2.4205     0.0083       0.3
%-ARSENIC       657.3    1071.      753.    0.0355     0.0027       7.6

  1009:  402.   449.   421.   380.   371.   435.   404.   400.   382.
  1018:  437.   386.   484.   444.   525.   495.   470.   437.   441.
  1027:  376.   371.   388.   371.   317.   387.   420.   391.   375.

  1117: 1586.  2142.  2366.  2186.  1590.  1314.  1526.  3075.  8122.
  1126:21491. 43734. 66835. 75998. 59018. 29458.  8933.  1954.   572.
  1135:  360.   309.   304.   270.   264.   229.   206.   245.   199.

  1301:   69.    77.    87.    94.    93.    95.    73.    81.    76.
  1310:   82.   101.   131.   171.   215.   255.   223.   136.    85.
  1319:   77.    60.    65.    80.    69.    74.    76.    63.    87.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.00      764.     4623.    2.96  1022.41 1017   12 1.274E 00  13.1
  2  6  559.54    12581.     4592.    3.19  1119.42 1109   42 2.097E 01   1.2
  3  6  564.21   315454.     2272.    1.97  1128.74 1109   42 5.258E 02   0.2
  4  1  602.88     9567.     2273.    2.00  1206.02 1196   21 1.595E 01   1.2
  5  1  646.01      720.     1172.    2.15  1292.23 1286   14 1.200E 00   7.7
  6  1  657.33      753.     1071.    2.08  1314.84 1309   14 1.255E 00   7.1
```

```
*****************************************************************
****************  10 JAN 1980 11:00:59 AM   ********************
*****************************************************************

9111.9065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:   A/S-6C
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:   12582.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1.
*****************************************************************
                                 *
ACQUISITION DATE:   8JAN80   351:09 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:       5.000
ELAPSED REAL TIME:      647. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                                 *
*****************************************************************
                                 *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1.
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV    * ABUNDANCE LIMIT:  85.00%
                                 *
*****************************************************************


UNKNOWN SAMPLE REPORT


                PEAK                             1 SIGMA
ELEMENT         ENERGY    BKGND     AREA     CONCENTR.   ERROR      %ERROR
-----------------------------------------------------------------------------

%-COPPER        510.7     6143.     1019.    0.0078      0.0009      11.4
%-ANTIMONY      564.2     2688.    360896.   2.4737      0.0084       0.3
%-ARSENIC       657.3     1679.     937.     0.0395      0.0029       7.4

 1009:   454.   538.   525.   481.   452.   440.   441.   478.   474.
 1018:   507.   506.   563.   531.   614.   597.   549.   492.   480.
 1027:   464.   428.   446.   433.   403.   445.   421.   405.   379.

 1117: 1867.  2460.  2893.  2484.  1948.  1492.  1850.  3523.  9607.
 1126:24833. 50403. 76925. 86661. 67130. 33124. 10126.  2163.  677.
 1135:   448.   422.   355.   352.   304.   321.   311.   292.   296.

 1301:   108.   106.   101.   103.   104.    99.    91.    86.    98.
 1310:   130.   132.   165.   235.   252.   294.   272.   187.   145.
 1319:   105.   124.    87.   101.   102.    87.    90.    93.    98.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

 PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  510.74     1019.     6143.    3.00  1021.88 1015  14 1.699E 00  11.3
  2  6  559.55    15275.     5163.    3.26  1119.43 1107  34 2.546E 01   1.0
  3  6  564.20   360896.     2688.    1.97  1128.73 1107  34 6.015E 02   0.2
  4  1  602.86    10672.     2950.    2.01  1205.98 1196  20 1.779E 01   1.2
  5  1  646.06      674.     1305.    1.90  1292.33 1287  12 1.123E 00   8.5
  6  1  657.31      937.     1679.    2.27  1314.81 1305  17 1.561E 00   7.0
```

```
91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  A/S-7A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   12640.00        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
**************************************************************
                             *
ACQUISITION DATE:  8JAN80  402:11 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC  * SENSITIVITY:      5.000
ELAPSED REAL TIME:      645. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC  * NBR ITERATIONS:   10.
                             *
**************************************************************
                             *
DETECTOR: GELI-8                 * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:       -0.5932283 KEV      * ABUNDANCE LIMIT:  65.00%
                             *
**************************************************************


UNKNOWN SAMPLE REPORT
```

	PEAK				1 SIGMA	
ELEMENT	ENERGY	BKGND	AREA	CONCENTR.	ERROR	%ERROR
%-COPPER	511.0	6435.	0. <	0.0029	NOT DETECTABLE	
%-ANTIMONY	564.2	2388.	349893.	2.3920	0.0081	0.3
%-ARSENIC	657.2	1290.	810.	0.0342	0.0026	7.6

```
  1009:  461.   455.   458.   482.   437.   425.   438.   455.   499.
  1018:  477.   473.   545.   519.   541.   561.   520.   515.   490.
  1027:  433.   407.   432.   378.   425.   432.   423.   400.   407.

  1117: 1834.  2505.  2842.  2415.  1885.  1407.  1786.  3410.  9296.
  1126:24214. 48749. 74190. 83453. 65322. 32309.  9818.  2119.   702.
  1135:  427.   410.   327.   340.   311.   268.   279.   271.   258.

  1301:   80.    86.    88.   103.   102.    84.   105.    96.    90.
  1310:   95.   108.   146.   229.   289.   322.   230.   161.   111.
  1319:   91.    88.   108.    78.    91.    95.    86.    83.    80.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	6	559.52	15197.	4674.	3.23	1119.38	1107	37	2.533E 01	1.0
2	6	564.20	349893.	2388.	1.98	1128.73	1107	37	5.832E 02	0.2
3	1	602.86	10502.	2793.	2.03	1206.00	1194	21	1.750E 01	1.2
4	1	645.92	660.	1245.	1.94	1292.05	1286	12	1.101E 00	8.5
5	1	657.21	810.	1290.	1.74	1314.60	1308	13	1.351E 00	7.2

```
********************************************************************
****************** 10 JAN 1980 11:03:18 AM  ******************
********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   A/S-7B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    13536.00         UNITS:   UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                   *
ACQUISITION DATE:   8JAN80 1534:59 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC   * SENSITIVITY:      5.000
ELAPSED REAL TIME:      644. SEC   * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC   * NBR ITERATIONS:  10.
                                   *
*****************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                   *
*****************************************************************


UNKNOWN SAMPLE REPORT


              PEAK                               1 SIGMA
ELEMENT      ENERGY    BKGND      AREA    CONCENTR.   ERROR      %ERROR
--------------------------------------------------------------------------

%-COPPER      511.0    5873.        0. <   0.0048     NOT DETECTABLE
%-ANTIMONY    564.2    2361.   338979.    2.4462      0.0083       0.3
%-ARSENIC     657.1    1124.      827.    0.0442      0.0032       7.2

   1009:   489.    431.    428.    408.    459.    456.    380.    457.    402.
   1018:   422.    407.    492.    455.    488.    501.    509.    476.    452.
   1027:   419.    393.    420.    395.    441.    415.    391.    420.    380.

   1117: 1615.   2082.   2346.   2157.   1589.   1399.   1697.   3243.   9046.
   1126:23374.  47087.  71838.  80382.  63090.  31846.   9918.   2141.    622.
   1135:  439.    368.    360.    313.    273.    280.    273.    272.    245.

   1301:   91.     81.     85.     90.    100.     99.     76.     86.     98.
   1310:   93.    113.    173.    199.    254.    248.    193.    141.    115.
   1319:   87.     79.     87.     72.     86.     90.     77.     88.     65.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY     AREA      BKGND    FWHM  CHANNEL  LEFT  FW   CTS/SEC    %ERR

  1  6  559.59    13381.     4955.   3.48  1119.52  1107  34  2.230E 01   1.1
  2  6  564.20   338979.     2361.   1.99  1128.74  1107  34  5.650E 02   0.2
  3  1  602.87    11416.     2560.   2.00  1206.00  1194  20  1.903E 01   1.1
  4  1  646.04      739.     1062.   1.89  1292.28  1287  11  1.232E 00   7.2
  5  1  657.08      827.     1124.   2.27  1314.34  1308  14  1.379E 00   6.7
```

91119065 RF LEAD

```
SAMPLE DATE:   7JAN80 115X:00
SAMPLE IDENTIFICATION:  A/S-7C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   11884.00         UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
*****************************************************************
                                  *
ACQUISITION DATE:  8JAN80   424:12 * FWHM(1332)        2.390
PRESET TIME(LIVE):      600. SEC   * SENSITIVITY:       5.000
ELAPSED REAL TIME:      647. SEC   * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC   * NBR ITERATIONS:    10.
                                  *
*****************************************************************
                                  *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06  * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:         0.5003803        * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                  *
*****************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	6237.	802.	0.0067	0.0010	14.5
%-ANTIMONY	564.2	2844.	368438.	2.6894	0.0091	0.3
%-ARSENIC	657.3	1743.	1040.	0.0472	0.0033	7.0

```
 1009:  505.   507.   489.   491.   454.   459.   469.   442.   472.
 1018:  472.   508.   498.   560.   576.   586.   538.   519.   488.
 1027:  467.   477.   434.   437.   418.   422.   424.   430.   435.

 1117: 1870.  2598.  2919.  2669.  1897.  1550.  1865.  3562.  9661.
 1126:25252. 51404. 78592. 88578. 68395. 34203. 10481.  2267.   697.
 1135:  493.   399.   387.   354.   359.   287.   294.   303.   312.

 1301:  113.   100.    99.   104.    87.   105.   105.    95.   120.
 1310:  117.   127.   151.   233.   315.   312.   292.   185.   125.
 1319:   94.   106.   111.    87.    84.    92.    96.    72.   105.
         PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.03	802.	6237.	2.84	1022.46	1016	14	1.337E 00	14.4
2	6	559.55	15270.	5571.	3.17	1119.43	1108	35	2.545E 01	1.1
3	6	564.20	368438.	2844.	1.97	1128.73	1108	35	6.141E 02	0.2
4	1	602.87	10995.	2983.	1.97	1206.02	1198	19	1.832E 01	1.2
5	1	645.93	669.	1413.	1.96	1292.07	1286	12	1.115E 00	8.8
6	1	657.29	1040.	1743.	2.06	1314.76	1305	19	1.733E 00	6.5

```
************************************************************
****************** 10 ● 1980 11:05:33 AM  *****●**********
************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  S626A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    9670.000      UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
************************************************************
                            *
ACQUISITION DATE:  8JAN80 1545:57 * FWHM(1332)       2.390
PRESET TIME(LIVE):     600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:     610. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:     600. SEC * NBR ITERATIONS:   10.
                            *
************************************************************
                            *
DETECTOR: GELI-8               * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803       * HALF LIFE RATIO:   8.00
OFFSET:        -0.5932283 KEV   * ABUNDANCE LIMIT:  85.00%
                            *
************************************************************


UNKNOWN SAMPLE REPORT

                 PEAK                                 1 SIGMA
ELEMENT          ENERGY    BKGND     AREA     CONCENTR.    ERROR      %ERROR
--------------------------------------------------------------------------

%-COPPER         511.0     1837.     4113.     0.0780      0.0021       2.7
%-ANTIMONY       564.2     2508.    71035.     0.7189      0.0035       0.5
%-ARSENIC        657.4      190.       0. <    0.0050      NOT DETECTABLE

  1009:    99.   100.    95.    97.    90.    95.   109.   124.   154.
  1018:   209.   303.   487.   675.   761.   737.   646.   466.   332.
  1027:   210.   140.   117.   108.    81.    67.    66.    76.    76.

  1117:   165.   247.   235.   233.   262.   246.   331.   705.  1775.
  1126:  4684.  9829. 15257. 17292. 13539.  6739.  2017.   355.    68.
  1135:    51.    25.    37.    27.    33.    24.    22.    23.    25.

  1301:    15.    14.    11.    22.    11.    12.    13.    14.    11.
  1310:    12.    13.    14.    13.    10.    16.    28.    16.    14.
  1319:    17.    12.    14.    18.    12.    11.    11.    15.    11.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

  PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  1  511.04    4113.     1837.    2.82  1022.48 1012   22 6.855E 00   2.1
  2  1  564.22   71035.     2508.    1.95  1128.76 1120   19 1.184E 02   0.4
  3  1  602.83    2494.      330.    2.05  1205.92 1197   20 4.156E 00   2.3
  4  1  646.14     164.      199.    2.09  1292.49 1286   15 2.730E-01  14.5
```

```
*******************************************************************
***************** 10 .⬤ 1980 11:06:43 AM   *****⬤**********
*******************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:   5626B
TYPE OF SAMPLE:   UNKNOWN
SAMPLE QUANTITY:    8226.000        UNITS:   UG
SAMPLE GEOMETRY:   .25 IN
EFFICIENCY FILE NAME:   EFF.TAB1
*******************************************************************
                                *
ACQUISITION DATE:   8JAN80 1556:19 * FWHM(1332)         2.390
PRESET TIME(LIVE):       300. SEC  * SENSITIVITY:        5.000
ELAPSED REAL TIME:       531. SEC  * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       524. SEC  * NBR ITERATIONS:    10.
                                *
*******************************************************************
                                *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:   26OCT79 1434:06 * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:       0.5003803           * HALF LIFE RATIO:   8.00
OFFSET:       -0.5932283 KEV        * ABUNDANCE LIMIT:  85.00%
                                *
*******************************************************************


UNKNOWN SAMPLE REPORT
```

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.0	1354.	3033.	0.0781	0.0023	3.0
%-ANTIMONY	564.2	1692.	52872.	0.7215	0.0039	0.5
%-ARSENIC	657.4	155.	0. <	0.0062	NOT DETECTABLE	

```
1009:   65.    80.    81.    58.    95.    80.    97.    79.   119.
1018:  161.   252.   359.   468.   563.   537.   459.   368.   236.
1027:  169.    98.    86.    70.    57.    67.    52.    65.    66.

1117:  118.   147.   156.   180.   165.   191.   262.   493.  1372.
1126: 3619.  7304. 11365. 12983.  9942.  4873.  1465.   263.    38.
1135:   26.    22.    16.    24.    26.    22.    17.    14.    17.

1301:   15.    10.     4.     8.    16.     6.     7.     8.     6.
1310:   10.    15.    14.    13.    16.    14.    13.     8.    12.
1319:    9.    14.    11.     8.    12.    11.    12.    13.    11.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.03	3033.	1354.	2.91	1022.48	1012	21	5.788E 00	2.5
2	1	564.21	52872.	1692.	1.94	1128.74	1120	18	1.009E 02	0.4
3	1	602.84	1868.	259.	2.05	1205.95	1195	23	3.566E 00	2.6
4	1	638.53	68.	165.	2.65	1277.27	1272	14	1.306E-01	29.1
5	1	645.88	105.	365.	2.13	1291.96	1287	27	2.012E-01	27.4

```
**************************************************************
****************** 10 ● 1980 11:07:52 AM  *****●************
**************************************************************

91119065 RF LEAD

SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  S626C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   8418.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
**************************************************************
                                *
ACQUISITION DATE:   8JAN80 1605:25 * FWHM(1332)        2.390
PRESET TIME(LIVE):         300. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:         305. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:         300. SEC * NBR ITERATIONS:   10.
                                *
**************************************************************
                                *
DETECTOR: GEL1-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL.:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:          -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                *
**************************************************************


UNKNOWN SAMPLE REPORT

                PEAK                                  1 SIGMA
ELEMENT         ENERGY    BKGND      AREA     CONCENTR.    ERROR       %ERROR
----------------------------------------------------------------------------

%-COPPER        511.0     1001.     1977.      0.0874      0.0031       3.6
%-ANTIMONY      564.2     1175.    34156.      0.7966      0.0050       0.6
%-ARSENIC       657.4      105.       0. <     0.0088      NOT DETECTABLE

  1009:    49.    56.    36.    53.    41.    60.    66.    66.    83.
  1018:   112.   180.   226.   307.   344.   348.   288.   245.   151.
  1027:    85.    71.    61.    34.    36.    45.    43.    39.    32.

  1117:   108.   108.   111.   111.   118.   139.   171.   303.   878.
  1126:  2434.  4825.  7252.  8199.  6444.  3120.   927.   184.    44.
  1135:    11.    18.    24.    15.    11.    15.    19.    16.    14.

  1301:     6.     5.    11.     8.     6.     5.    13.     9.     9.
  1310:     7.     9.     9.    11.     5.     9.    10.     9.     6.
  1319:     8.     8.     5.     4.     8.     6.     4.     5.     3.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL  LEFT PW   CTS/SEC    %ERR

 1  1  511.02   1977.     1001.   3.05  1022.46  1011   23 6.589E 00   3.2
 2  1  564.20  34156.     1175.   1.97  1128.73  1120   18 1.139E 02   0.6
 3  1  602.86   1186.      236.   1.94  1205.99  1196   27 3.953E 00   3.4
 4  1  645.69     76.      145.   2.55  1291.59  1281   20 2.527E-01  25.2
```

9111.9065 RF LEAD

```
SAMPLE DATE:   7JAN80 1153:00
SAMPLE IDENTIFICATION:  S604A
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   8455.000          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
**********************************************************************
                                   *
ACQUISITION DATE:  8JAN80 1610:44 * FWHM(1332)        2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:      5.000
ELAPSED REAL TIME:       620. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:   10.
                                   *
**********************************************************************
                                   *
DETECTOR: GELI-8                  * LIBRARY:NUCL.LIB1
 DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:       0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:       -0.5932283 KEV      * ABUNDANCE LIMIT:  85.00%
                                   *
**********************************************************************
```

UNKNOWN SAMPLE REPORT

ELEMENT	PEAK ENERGY	BKGND	AREA	CONCENTR.	1 SIGMA ERROR	%ERROR
%-COPPER	511.6	2373.	307.	0.0068	0.0016	23.2
%-ANTIMONY	564.2	895.	149470.	1.7377	0.0068	0.4
%-ARSENIC	657.2	695.	1037.	0.0901	0.0049	5.4

```
1009:  186.   205.   169.   158.   201.   196.   212.   196.   203.
1018:  200.   174.   173.   217.   258.   241.   243.   209.   234.
1027:  225.   188.   204.   170.   208.   184.   181.   165.   184.

1117: 1588.  2329.  2672.  2161.  1384.   795.   771.  1462.  3965.
1126:10264. 21014. 31845. 35788. 27679. 13602.  3864.   771.   185.
1135:  115.   109.    86.    95.    83.    80.    88.    75.    72.

1301:   26.    39.    34.    38.    32.    19.    34.    37.    33.
1310:   41.    73.   112.   185.   264.   259.   193.   134.    51.
1319:   51.    35.    35.    34.    32.    38.    43.    29.    35.
          PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000
```

PK	IT	ENERGY	AREA	BKGND	FWHM	CHANNEL	LEFT	PW	CTS/SEC	%ERR
1	1	511.64	307.	2373.	2.49	1023.69	1017	12	5.118E-01	23.1
2	3	559.32	12062.	1428.	2.40	1118.97	1107	35	2.010E 01	1.0
3	3	564.20	149470.	895.	1.97	1128.72	1107	35	2.491E 02	0.3
4	1	602.86	5139.	971.	2.03	1205.99	1194	21	8.566E 00	1.6
5	1	646.08	351.	546.	1.80	1292.37	1286	14	5.852E-01	10.8
6	1	657.19	1037.	695.	2.11	1314.57	1303	20	1.728E 00	4.8

```
****************************************************************
****************** 10 ● 1980 11:10:11 AM   *****●**********
****************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  S604B
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:   7462.000        UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
****************************************************************
                                   *
ACQUISITION DATE:   8JAN80 1621:18 * FWHM(1332)         2.390
PRESET TIME(LIVE):      600. SEC   * SENSITIVITY:       5.000
ELAPSED REAL TIME:      619. SEC   * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:      600. SEC   * NBR ITERATIONS:   10.
                                   *
****************************************************************
                                   *
DETECTOR: GELI-8                   * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06  * ENERGY TOLERANCE:   2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:    8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:   85.00%
                                   *
****************************************************************


UNKNOWN SAMPLE REPORT


              PEAK                             1 SIGMA
ELEMENT      ENERGY    BKGND    AREA   CONCENTR.   ERROR    %ERROR
----------------------------------------------------------------------

%-COPPER     511.0    2539.       0. <  0.0060    NOT DETECTABLE
%-ANTIMONY   564.2     882.  141143.   1.8627     0.0074       0.4
%-ARSENIC    657.1     516.     996.   0.0986     0.0051       5.2

  1009:  189.   212.   209.   175.   175.   193.   200.   161.   183.
  1018:  194.   191.   192.   220.   198.   217.   216.   204.   200.
  1027:  190.   173.   144.   184.   153.   175.   171.   178.   149.

  1117: 1453.  2131.  2389.  2040.  1245.   748.   736.  1472.  3754.
  1126: 9868. 19786. 29883. 33488. 26131. 13031.  3728.   733.   178.
  1135:   80.    89.    98.    75.    96.    79.    70.    79.    77.

  1301:   36.    36.    32.    28.    42.    32.    33.    39.    34.
  1310:   47.    76.   111.   167.   281.   246.   188.   103.    54.
  1319:   44.    27.    29.    37.    27.    30.    32.    24.    35.
            PULSE-PILE-UP CORRECTED DATA.  CORRECTION =  1.000

PK IT  ENERGY    AREA    BKGND   FWHM  CHANNEL LEFT FW   CTS/SEC    %ERR

  1  3  559.33   10887.   1514.  2.40  1119.00 1109   29 1.814E 01   1.1
  2  3  564.20  141143.    882.  1.99  1128.72 1109   29 2.352E 02   0.3
  3  1  602.88    4694.    803.  1.99  1206.03 1197   19 7.824E 00   1.7
  4  1  646.03     259.    560.  1.91  1292.27 1285   14 4.318E-01  14.3
  5  1  657.12     996.    516.  1.99  1314.42 1307   16 1.660E 00   4.5
```

```
***********************************************************************
****************  10 J●  1980 11:11:19 AM  *****●***********
***********************************************************************

91119065 RF LEAD

SAMPLE DATE:    7JAN80 1153:00
SAMPLE IDENTIFICATION:  S604C
TYPE OF SAMPLE:  UNKNOWN
SAMPLE QUANTITY:    8039.000          UNITS:  UG
SAMPLE GEOMETRY:  .25 IN
EFFICIENCY FILE NAME:  EFF.TAB1
***********************************************************************
                                    *
ACQUISITION DATE:  8JAN80 1631:47 * FWHM(1332)         2.390
PRESET TIME(LIVE):       600. SEC * SENSITIVITY:       5.000
ELAPSED REAL TIME:       623. SEC * SHAPE PARAMETER : 15.0 %
ELAPSED LIVE TIME:       600. SEC * NBR ITERATIONS:    10.
                                    *
***********************************************************************
                                    *
DETECTOR: GEL1-8                  * LIBRARY:NUCL.LIB1
DATE CALIBRATED:  26OCT79 1434:06 * ENERGY TOLERANCE:  2.000KV
KEV/CHNL:        0.5003803         * HALF LIFE RATIO:   8.00
OFFSET:         -0.5932283 KEV     * ABUNDANCE LIMIT:  85.00%
                                    *
***********************************************************************


UNKNOWN SAMPLE REPORT


                 PEAK                                  1 SIGMA
ELEMENT          ENERGY    BKGND      AREA     CONCENTR.  ERROR      %ERROR
-----------------------------------------------------------------------
%-COPPER         511.0     3058.       0. <    0.0062    NOT DETECTABLE
%-ANTIMONY       564.2     1067.    164151.    2.0146    0.0077       0.4
%-ARSENIC        657.3      575.      1217.    0.1123    0.0053       4.7

  1009:  230.   207.   215.   218.   217.   210.   235.   204.   201.
  1018:  206.   242.   249.   253.   276.   279.   269.   234.   239.
  1027:  213.   193.   207.   184.   181.   178.   201.   202.   200.

  1117: 1801.  2570.  3018.  2374.  1476.   940.   927.  1664.  4419.
  1126:11398. 23227. 34838. 38989. 30132. 15098.  4437.   849.   205.
  1135:  140.    98.   119.    98.    79.    89.   100.    87.    89.

  1301:   36.    38.    47.    25.    28.    35.    45.    40.    48.
  1310:   46.    62.   118.   209.   255.   279.   258.   147.    75.
  1319:   45.    37.    37.    38.    28.    40.    36.    34.    34.
           PULSE-PILE-UP CORRECTED DATA. CORRECTION =  1.000

 PK IT  ENERGY    AREA     BKGND    FWHM  CHANNEL LEFT PW   CTS/SEC    %ERR

  1  3  559.33   13441.    1726.    2.42  1119.00 1108  34 2.240E 01   1.0
  2  3  564.19  164151.    1067.    1.99  1128.71 1108  34 2.736E 02   0.2
  3  1  602.88    5614.    1021.    1.97  1206.04 1196  19 9.356E 00   1.6
  4  1  645.97     329.     808.    1.94  1292.15 1286  17 5.476E-01  13.4
  5  1  657.28    1217.     575.    2.23  1314.74 1305  19 2.029E 00   4.0
```